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TEACHER AND STUDENT OPINIONS OF THE SEMESTER SYSTEM IN EDMONTON

by

© GLYN NEIL WYNN

A THESIS

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ABSTRACT

The purposes of this study were to record and analyze the opinions of the teachers and students of the Edmonton Public School System concerning the semester system in which they were involved during the 1969-70 school year.

Data for the study were obtained from opinionnaires completed by 347 teachers and 5717 students of the five public high schools using the semester system at that time.

The teachers' opinionnaire was comprised of fifty-three multiple choice items, and the students' opinionnaire was comprised of fifty-eight multiple choice items. The items of both opinionnaires were categorized under the following general headings: personal information, the effect of semestering on teacher presentation, the impact of semestering on the students, the effects of the eighty-minute period used in the semester system, and items of miscellaneous concern.

The analysis of the data intially involved the cataloging of the opinion trends of the teachers and students concerning the semester system. Secondly, answers were sought to the following questions: (1) Were there significant differences among the opinions of the teachers across the five schools? (2) Were there significant differences among the opinions of the students across the five schools; (3) Were there significant differences between the opinions of the teachers and students of each school individually? To establish whether recorded opinion differences were statistically significant, Chi Squares and associated probabilities were calculated for each item

dealt with.

The opinion trends of the teachers and students tended to be consistently more positive than negative concerning the semester system, and a large majority of both groups recorded the opinion that they would rather continue with the semester system than return to the conventional ten-month school-year. Statistically significant differences ($p \leq 0.01$) were found among the opinions of the teachers across the five schools on a majority of the items dealt with, and among the opinions of the students across the five schools on all of the items dealt with (due in part to the effect of the large sample on the Chi Square Statistic). Statistically significant differences were found between the opinions of teachers and students on a majority of the items dealt with in four of the five schools responding.

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TABLE OF CONTENTS

CHAPTER PAGE

I. INTRODUCTION 1

Need for the Study 4

The Problem 7

Definition of Terms. 8

Delimitations. 9

Limitations. 10

Summary. 10

II. REVIEW OF THE LITERATURE 12

Plans for Altering the Traditional School Year 14

Reorganization of the School Year in Canada. 22

The Alberta Trimester System 24

The Alberta Semester System. 28

Recent Proposals for School Year Reorganization in Alberta 35

III. RESEARCH DESIGN AND METHODOLOGY 39

The Sample 39

Collection of Data 44

Treatment of Data. 44

Scoring. 44

Hypotheses 45

Statistical Treatment. 45

IV. RESULTS AND DISCUSSION 48

Introduction 48

CHAPTER PAGE

The Opinion Trends of the Teacher and Student Samples. . 48
  Analysis of Data 49
The Measurement of Opinion Differences 80
  Hypotheses 1 and 2 83
  Hypothesis 3 105
Summary of Chapter IV 121
V. SUMMARY, GENERALIZATIONS AND IMPLICATIONS. 128
Summary of the Study 128
Review of the Findings 129
  Opinion Trends of the Teacher and Student Samples. . . 129
  Measurement of Opinion Differences 137
Generalizations. 145
Implications 150
Recommendations for Further Study. 154

BIBLIOGRAPHY 157
APPENDICES 161
Appendix A: The Teacher and Student Opinionnaires
  and Recorded Responses 163
Appendix B: Teacher and Student Responses to Items
  of Similar Intent. 184

LIST OF TABLES

TABLE PAGE

I. Items from Teacher Opinionnaire Concerning the Teaching Process 51

II. Items from Student Opinionnaire Concerning Teacher Presentation 52

III. Items from Teacher Opinionnaire Concerning Impact on Student 56

IV. Items from Student Opinionnaire Concerning Impact on Student 58

V. Items from Teacher Opinionnaire Concerning the Eighty-Minute Period 64

VI. Items from Student Opinionnaire Concerning the Eighty-Minute Period 68

VII. Miscellaneous Items from the Teachers' Opinionnaire . 75

VIII. Miscellaneous Items from the Students' Opinionnaire . 77

IX. Teachers' Response Patterns Across the Five Schools on Items Concerning Teaching Process 84

X. Students' Response Patterns Across the Five Schools on Items Concerning Teaching Process 87

XI. Teachers' Response Patterns Across the Five Schools on Items Concerning Impact on Student 89

XII. Students' Response Patterns Across the Five Schools on Items Concerning Impact on Student 92

TABLE PAGE

XIII. Teachers' Response Patterns Across the Five Schools on Items Concerning the Eighty-Minute Period. . . . 95

XIV. Students' Response Patterns Across the Five Schools on Items Concerning the Eighty-Minute Period. . . . 99

XV. Teachers' Response Patterns Across the Five Schools on Miscellaneous Items. 102

XVI. Students' Response Patterns Across the Five Schools on Miscellaneous Items. 104

XVII. Students' Responses Versus Teachers' Responses by Schools to Items of Similar Intent. 107

XVIII. Summary of Results: A School by School Comparison of Students' and Teachers' Opinions on Items of Similar Intent. 112

CHAPTER I

INTRODUCTION

Traditionally the school year in Alberta has started on September first and ended ten months later on the thirtieth of June. In high schools, full-year five credit courses were studied for the entire ten month period, and three credit half-courses were studied for five months. In September of 1949 a break from the traditional school year was instituted when Lindsay Thurber Composite High School of Red Deer embarked into an experimental year divided into three 'semesters' (Forty-Fifth Annual Report, Alberta, 1950). This system, now referred to as a 'trimester system' was tried in grade twelve only for the first year. A full course was covered during approximately three months, with the trimesters extending from September first to December thirty-first; from January first to March thirty-first; and from April first to June thirtieth. Special departmental examinations were written at the end of each trimester. (Forty-Fifth Annual Report, Alberta, 1950).

During 1953-54 three schools, Red Deer Composite, Mount Royal College, Calgary, and Alberta College, Edmonton, worked under a short-term scheduling arrangement in which grade twelve departmental examinations were written in only December and March. (Forty-Ninth Annual Report, Alberta, 1954). By 1960 a total of seven schools were using some form of 'semester' arrangement. (Department of Education Report, Alberta, 1968).

In 1966 the high school regulations were changed to allow any high school to apply for a change to the semester system. Some latitude was allowed in the semester organization adopted by each school, but the plan generally used called for a division of the year into two approximately equal semesters. The first semester would begin in the first week of September and terminate at the end of January. The second semester would begin in the first week of February and terminate on June 30th. The school day generally would be divided into four periods of approximately eighty minutes each. A student could complete a maximum of four subjects in each semester. Following this change in regulations, thirty-two Alberta schools were using the semester system in the year 1966-67. (Dept. of Ed. Report, Alberta, 1968). Since then numerous schools have adopted the semester system and have expanded the system for use in most subjects at all three high school grades.

The semester system first appeared in Edmonton in the 1953-54 term when Alberta College offered a short-term program primarily to adults and others who had left the public school system. Alberta College continued to be the only Edmonton semester school until September, 1967 when a semester project was started at Harry Ainlay Composite High School. The main objective of the project was to serve the needs of grade twelve students who required one or two subjects to complete matriculation or to obtain a high school diploma. One hundred and forty students attended the first year and were served by a Director (Dr. J. Dubeta), and five teachers. The next year the school was moved to Cromdale School and continued

during 1970-71 at Strathcona Semester High School. (Edmonton Public School Board, 1970).

In September 1967, St. Mary's Separate High School became the first regular Edmonton high school to adopt the semester organization. In September 1968 Jasper Place Composite High School and Victoria Composite High School became the first regular public high schools in Edmonton to adopt the semester system. In that same year, Ross Sheppard Composite High School adopted a split-semester system analogous to the semester system of the United States. Under this arrangement full-year courses are divided into two parts with a final examination being written at the end of each half. This system remained in progress at Ross Sheppard during 1969-70 and 1970-71.

In the 1969-70 school year, five Edmonton public high schools were operating on the semester system. Strathcona Semester School, and Jasper Place, Victoria, and McNally Composite High Schools were fully semestered and Queen Elizabeth Composite was on semester for about half of the courses offered. During the 1970-71 school term Queen Elizabeth Composite converted to a full semester system from its partial plan of the previous year, and Strathcona Composite adopted the semester system. The public high schools in Edmonton had a total student population of 18,408 and a teacher population of 961 as of October, 1970. Of these totals, 9,591 students (52%) and 475 teachers (49%) were involved in the semester system. (Edmonton Public School Board, 1970). During the 1970-71 school term, five out of a total of nine (56%) of the Edmonton Separate High Schools

involving 4800 out of a total of 8900 (54%) students were using the semester system. (Edmonton Separate School Board, 1971).

The Alberta semester system has not been exposed to as rigorous an evaluation as it would appear to warrant. Some schools have administered informal questionnaires to obtain gross opinions of students, teachers and administrators concerning the semester system. An attempt was made in two studies (Girard, 1962; Fehlberg, 1968) to measure differences in student achievement between trimester and semester organizations as compared to the traditional ten month year. Arnot (1969) questioned principals of a variety of semestered and non-semestered high schools on perceived advantages and disadvantages of the semester system compared to the conventional school year. In 1966, the Calgary Public School Board sponsored an institute on semester systems during which it gathered a wealth of opinions from teachers and administrators concerning the relative merits of the semestered and traditional school year. (Calgary School Board, 1966). To date, no such data have been obtained from the Edmonton school systems.

NEED FOR THE STUDY

There is at present no study on record that has attempted to tabulate and analyze the opinions of students and teachers with respect to a wide variety of factors concerning the Alberta semester system. Informal questionnaires have been administered at various locales throughout the province but no attempt has been made to statistically treat the data nor to establish its significance.

Further, there have been no attempts to establish the presence or lack of significant differences between the opinions of students and those of teachers. In his recommendations for further study, Arnot (1969) suggests that students and teachers should now be questioned to determine their reactions to the semester system.

The writer taught under the semester system of school organization during the 1968-69 school term at Victoria Composite High School in Edmonton. During that year many opinions of the semester system were formed by the writer, and the opinions of other teachers were continually being noted. At that time it became apparent that the opinions of teachers and students should be surveyed to gain a measure of their reactions to the semester system. Having become interested in conducting a study to survey the opinions of teachers and students who were experiencing the semester system, the writer was fortunate to become involved with the Edmonton Public School Board in a study that originally involved only Queen Elizabeth Composite High School. Many problems plagued the Queen Elizabeth study. Work on it was discontinued in favor of conducting this study which involved all of the teachers and students of the five Edmonton Public High schools using the semester system of school year organization during the 1969-70 school term.

Fehlberg (1968) and Girard (1962) had found that there were little, if any, achievement differences between students of trimestered and semestered schools and those of schools using the traditional ten month plan. No formal studies had been conducted to document the opinions of those involved in the semester system,

although the Calgary School Board (1966) had conducted a seminar to consolidate the reactions of some administrators and teachers who had experimented with the semester system across the province. The Edmonton Public School System was experimenting with the semester system of school year organization and was in need of some concrete measures on which to base future decisions concerning the organization of the school year.

In this study an attempt is made to tabulate the opinions of students and teachers in a systematic form and to establish whether the two groups reach any agreement concerning their opinions of the semester system. The Edmonton Public School system was used in this study because of geographical convenience and because the cooperation received from this system allowed the writer to survey all of the teachers and students involved in the semester system of school-year organization in the Edmonton Public High schools. The study will be of direct benefit to the Edmonton Public School Board as it will give it a measure of the reactions of teachers and students to the semester system of school-year organization, and will act as a basis on which to plan future organizational changes. It is hoped that the study will also be of use to other school boards who wish information concerning the semester system in order to judge its merits for future use. Many of the school systems contacted throughout Alberta and Canada have voiced an interest in the results of the study.

THE PROBLEM

Statement of the Problem

Although the semester system has been in use in Alberta since 1953, to the end of 1968 no thorough analysis of the opinions of students and teachers of semestered schools had been made. The main goal of this study is to collect the opinions of the students and teachers of semestered schools concerning specific questions involving the following:

(1) What effects does semestering have on the teaching process?

(2) What is the impact on the student because of semestering?

(3) What are the effects of the eighty-minute period on teachers and students?

(4) What are the effects of semestering on various miscellaneous areas of concern to teachers and students?

Specifically, the purposes of the study are to answer the following questions concerning the collected opinions:

(1) What are the opinions of the students and teachers? How do their opinions compare and what opinion trends are recognizable?

(2) Do the teachers as a whole across the five schools agree concerning their opinions of the semester system?

(3) Do the students as a whole across the five schools agree concerning their opinions of the semester system?

(4) Do the teachers and the students of the same school agree concerning their opinions of the semester system?

In cooperation with the Edmonton Public School Board the writer was able to collect the opinions from virtually all of the students and teachers of the Edmonton Public high schools using the semester system of school-year organization.

DEFINITION OF TERMS

Semester System

This term is used to describe the method of school-year organization in which the year is divided into two approximately equal portions. The first semester typically begins at the beginning of September and ends in the last week of January. The second semester begins in the first week of February and ends on the 30th of June. A full course is covered in one semester. Final examinations are scheduled in the last week of January and June.

Traditional System

This term is used to describe the method of school-year organization in which the school year is one complete ten month unit beginning near September first and ending near the end of June. Final examinations are scheduled only at the end of June.

Semestered Schools

This term refers to the five Edmonton Public high schools

at present using the semester system -- Jasper Place Composite, Victoria Composite, McNally Composite, Queen Elizabeth Composite, and Strathcona Semester School.

Student Questionnaire

This term refers to the questionnaire that was administered to the students of the semestered schools. A copy of the questionnaire appears in Appendix A.

Teachers Questionnaire

This term refers to the questionnaire administered to the teachers of the semestered schools. A copy of the questionnaire appears in Appendix A.

DELIMITATIONS

1) Only the opinions of teachers and students of the five semestered schools at the time of the administration of the questionnaire (December, 1969) will be considered in this study.

2) The treatment of the data will be primarily descriptive. Simple analytical methods will be employed to establish significance where possible.

3) No achievement measures will be attempted other than by means of subjective evaluation by teachers and students surveyed.

4) No attempt will be made to differentiate between opinions of the teachers of the various subject areas such as science, French, etc.

LIMITATIONS

1) The instruments used in the study are questionnaires which may not produce an accurate nor complete picture of the opinions of the students and teachers questioned.

2) Data reported represent the situations as perceived by teachers and students -- not actual situations re achievement, attendance, work load, etc.

3) The results gained depend wholly on the reliability of the opinions of the teachers and students surveyed.

4) The opinions of teachers and students will undoubtedly tend to vary because of amount and kind of experience that each has had with the semester system.

SUMMARY

The traditional ten month school year was the only type of school-year organization used in Alberta Schools until the trimester system was initiated in Red Deer in 1949. During the next decade, three Alberta high schools experimented with school-year organization, until by 1960 seven schools were using some form of a year divided into two equal parts or "semesters". Two studies (Girard, 1962, and Fehlberg, 1968) have attempted to measure student achievement differences between trimester and semester organizations and the traditional school year and have found few significant differences. The Calgary School Board (1966, 1970) has gained a wealth of opinion from teachers and administrators concerning the relative merits of the semester system in use in Calgary and various other parts of the province. During the 1969-70 school year,

approximately 74 percent of the Alberta high schools were either wholly or partially semestered and a similar percentage (approximately 73%) of the schools are using the semester system during the 1970-71 term. Little concrete evidence supports or condemns the semester system. This writer has attempted to survey the opinions of students and teachers involved in the semester system in the Edmonton Public high schools, and to analyze the data gained in order to give the reader a picture of the subjects' reactions to the semester system.

In the review of the literature which follows, the reader will note that few studies have attempted to measure variables concerning the semester system of school-year organization as used in Alberta. Some studies have involved the semester system used in the United States, but since this is an entirely different system than the "Alberta Semester System", few if any parallels can be drawn. Various methods of school-year reorganization are outlined in the review and some speculation concerning future possibilities is attempted.

The study was originally designed to be wholly descriptive, but the reader will observe that some non-parametric statistics are used to establish whether differences noted in the opinions of the groups surveyed are statistically significant. The results are analyzed and tabulated in the hope of presenting a concise picture of the opinions of students and teachers concerning the semester system in the Edmonton Public School System.

CHAPTER II

REVIEW OF THE LITERATURE

In the United States the prevalent organization of the school year incorporates a full term of approximately one hundred and eighty days between September first and the end of May. The traditional Canadian School year has a full term of approximately two hundred days between September first and the end of June. Many view these arrangements as resulting from the needs of a predominantly agricultural society in which children were required on the farm in the late spring, summer and early fall. Since our society is now predominantly urban, it seemed logical and necessary to adapt the school year to the changing needs of an urban population .

The organization of the school year has been a close reflection of society's needs in the past. In the agricultural areas of the United States, early schools were only kept open when the children were not needed on the farm -- usually in the winter months only. Very young children attended special summer schools, mainly because they were too small for farm work, and weather and road conditions made it difficult for them to attend in winter. (N.E.A., 1968, p. 6). During these times (prior to 1840) many of the city schools were conducted for nearly the full year. The school year was divided into four terms of twelve weeks each, with a one week vacation between terms. This organization was gradually altered to provide a one-week vacation at Christmas and Easter, and two weeks during the summer. (N.E.A., 1968, p. 6).

In the seventy-five years following 1840, the city schools increased their vacation periods while the country schools decreased theirs until by 1915 most of the schools in the United States were using a nine month school year. Many school systems continued to operate a vacation school which originally offered recreational activities but which later also offered academic courses. (N.E.A., 1968, p. 6).

The evolution of school year organization in Canada has followed a similar course to that of the United States. In the early eighteen hundreds, country schools were operated for a winter or spring term of six months, when the children were free to attend. (Phillips, 1957, p. 242). During the latter half of the nineteenth century schools were commonly in session for five days a week with a two-week vacation at Christmas and a four week summer break. The present-day September to June school year began to appear in the early years of the twentieth century. Phillips sees prosperity, increased consideration for children, and the establishment of summer schools for the professional improvement of teachers as factors influencing the evolution of this form of organization. (Phillips, 1957, p. 242).

Plans for rescheduling the school-year have been much more prevalent in the United States than in Canada. Reports of Royal Commissions on Education in Ontario, Manitoba and British Columbia indicate general satisfaction with the present school-year organization (Royal Commission, Ontario, 1950; Royal Commission, Manitoba, 1959; Royal Commission, British Columbia, 1960). The divided school-year was discussed with interest in the report of the

Royal Commission on Education for the Province of Alberta, (Royal Commission, Alberta, 1959). This interest undoubtedly was due at least in part to semester and trimester operations in Red Deer. An all-year school was first advocated during the first World War in the United States, and it along with a variety of other plans are presently in use in various parts of that country. Some of these plans will be elaborated upon in a later section of this review.

PLANS FOR ALTERING THE TRADITIONAL SCHOOL-YEAR

Most of the rescheduling plans call for an extended school-year to facilitate the year-round utilization of the school. The reasons given for considering these plans are many and perhaps are worth noting: (N.E.A., 1968, pp. 6, 7).

1. Economy -- Year-round utilization of the schools can result in savings by negating much new construction and requiring fewer teachers.
2. Teacher status improvement -- Teachers would be employed for a full year and thus would earn more money and have no need to seek summer work. Several plans give the teacher more free time for curriculum work and planning.
3. The teacher shortage would be alleviated by more efficiently utilizing the present teachers.
4. Various plans for extended school years provide much time for remediation and enrichment in class and in summer schools.

5. Pupil acceleration can be more easily handled in all-year plans.
6. The all-year plans keep a large percentage of the youth off the streets during the summer months and could reduce the problems of juvenile delinquency.

After surveying forty-four college professors, two hundred superintendents, and one hundred teachers of city school systems throughout the United States, Quick (1966) found that one-quarter of the schools surveyed had increased the length of the school year since 1961. In most cases the extensions were to satisfy changes in state laws. In addition to the above cited advantages concerned with extending the school-year, Quick reported that the extra time allowed the schools to build more flexibility into class scheduling, making them more able to accommodate students unable to fit into the regular schedules. Quick's respondents also indicated that the added time could be used to teach more effectively the "ever-increasing amount of world knowledge".

Few of the above advantages cited concerning lengthening the school-year deal with pedagogic variables. This may be one factor contributing to the minimal experimentation with, and acceptance of most extended school-year plans throughout Canada and the United States. Scala (1968) reports that between 1904 and 1967 in the United States forty-five school systems and five individual schools instituted and subsequently abandoned some type of extended year program. In 1967, nineteen school systems and three individual schools were engaged in extended school-year plans, and eleven school

systems were cited as investigating the possibility of instituting some form of extended school-year plan. Scala concluded that no evidence of economy of capital could be linked to the extended school-year. The bulk of the evidence revealed that the savings in building costs were offset by increased maintenance costs and teacher salaries. Scala reported that the reasons given for abandoning extended year plans were varied and difficult to generalize. However, he states that the plan that appeared to operate most successfully during the 1960's was the "Summer Enrichment Plan" employing an eleven month year. Based on the results of his study, Scala suggests the use of a trimester plan with a voluntary six week summer school and regular vacation times.

Slightly later figures reveal that perhaps extended year plans are growing in popularity. As of the end of 1968, approximately sixty school systems in the United States were considering the use of extended year plans. (N.E.A., 1968, p. 5).

The following are some of the most popular plans employed in altering the organization of the school year in Canada and the United States:

1. Semester System of the United States

The most common system of school-year organization presently in use in the United States is the semester system. Under this system a full year of one hundred and eighty days is divided into two terms of ninety days each. A full year course is divided in half with a final examination being written on the first half of the

course at the end of the first term. The final examination for the second half of the course is written at the end of the second term. Pupil achievement under the semester plan was compared to achievement under the annual plan by Forsheit (1963). By testing subjects from City High School in New York City, Forsheit concluded that achievement in French, English and Social Studies was superior under the annual plan, while achievement in Mathematics was superior under the semester plan. Forsheit suggested that it seemed advantageous to organize the school program with some subjects on an annual organization and some on semester.

2. Traditional Summer-School Plan

A plan popular in Canada and the United States adds an optional summer school program during the summer vacation (Edmonton Public School Board, 1970 ; National School P. R. Association, 1965). The summer schools offer regular academic courses, special enrichment programs and a variety of recreational activities. Some of the commonly cited advantages of this system include the following: the plan offers increased educational opportunities without requiring major curriculum or organizational changes; pupils failing subjects can repeat a course or receive tutorial help; all pupils have the opportunity to take special courses not normally offered; teachers may be employed throughout the year; participation is voluntary and does not interfere with family summer vacations. A disadvantage noted is the fact that the operation of a summer school increases the total educational costs because the optional nature of the program

usually results in relatively low attendance thus giving a small return on the investment. (N.E.A., 1968, p. 9).

3. Rotating Four-Quarter Plan

This plan was first tried in Indiana in 1904 (N.E.A., 1968, p. 11). It divides the year into four equal quarters of approximately twelve weeks, with a group of pupils attending three consecutive quarters and vacationing in the fourth. At any one time, three quarters of the students are in school and one quarter are on holidays. In various revisions of this plan, teachers may or may not be required to teach for all four quarters. The rotating four-quarter plan has been experimented with very thoroughly in many parts of the United States, and the majority of systems have concluded that its disadvantages outweigh its advantages. A modification of the plan whereby the traditional nine-month year is divided into three quarters plus an optional fourth quarter in the summer is receiving attention. (N.E.A., 1968).

4. Continuous Four-Quarter Plan

Economy of operation is a major goal of this plan which is similar to the rotating plan with pupils being encouraged to attend the fourth quarter. Acceleration is easily achieved in this system as the gifted student can complete twelve years of school in nine years. (N.E.A., 1968, p. 15.).

5. Extended Year Plans (N.E.A., 1968, pp. 16-35)

Operating in many parts of the United States are plans that not only aim at better utilization of the school year, but further attempt to gain pupil acceleration. Inherent in most of these plans is a school year of 210 or more days, a shortened summer vacation, and the attendance of each student for each day with no cycling. The names of some of these plans are the following: Continuous School-Year or Continuous Progress Plan; Multiple Trails Plan; Two Semesters Plus Modified Summer-School Plan; Trimester Plan, Quadrimester Plan; Extended K-12 Plan. Some aspects of these plans are the following:

(i) Continuous School-Year Plan or Continuous Progress Plan. This plan is based on a 210 day school-year with 180 days being spent on the year's work and the remaining thirty days being spent on the following year's initial work. Seven grades may be completed in six years.

(ii) Multiple Trails Plan. This plan is based on a 210 day year and may be implemented in four stages using multiple time modules. Classes are able to meet less often thus classroom space is released, and teacher and pupil load is decreased. Student acceleration is easily implemented. However, the plan requires vast curriculum revision and

continuous effort to keep the continuous progress aspect moving.

(iii) Two Semester Plus Modified Summer-School Plan. This plan promotes student acceleration by implementing a summer school and results in a school-year of about 220 days. The summer school is optional but allows the keen student to accelerate. The voluntary summer school does not usually require full plant use and thus costs may rise.

(iv) Trimester Plan. This plan involves a school-year of 204 to 225 days divided into three terms. The plan allows for pupil acceleration by increasing the length of class periods and of the school-year.

(v) Quadrimester Plan. This plan involves a school-year of 204 to 225 days divided into four terms. The plan also allows for pupil acceleration by increasing the length of class periods and of the school year. However, courses are greatly compressed in time which can cause difficulty.

(vi) Extended K-12 Plan. This is a composite of other extended school-year designs and involves a 204 to 225 day school-year. Grades K-6 use the extra school days for enrichment, and grades seven

> to twelve operate on a trimester or quadrimester plan. One year of schooling out of thirteen is eliminated. Daily class periods are lengthened, and more staff is sometimes required to provide enrichment.

Studies conducted on some of the above mentioned plans for reorganization of the school-year yield conflicting views.

In an attempt to compare the American Trimester Plan to the American semester and quarter system, a survey involving thirty-one institutions of higher education in the United States was carried out. (Mace, 1964). Mace concluded that in most cases the adoption of the trimester system was an economic rather than an educational move. While the trimester system appeared to be most advantageous for pupil acceleration, no other group appeared to gain much advantage from it. On the contrary, teachers who wished to attend summer school were at a disadvantage if they were teaching under a trimester system. The trimester system did however provide more efficient use of plant, equipment and staff. Although the cost per student was lower the overall fiscal budget was increased. From the data collected, Mace concluded that either the trimester or semester plan was more advantageous than the quarter system.

Data collected by Mertes (1968) in a study involving 233 sophomore students of Chabot Community College, Hayward, California, indicated that students felt much greater pressure and a feeling of being rushed after transferring from a semester to a quarter system. Under the quarter system students found that they had less time for adequate use of the library, less contact with the

faculty, decreased opportunity to take elective courses, and a great increase in problems associated with registration procedures. Mertes also concluded from the data that the academically oriented student succeeded better under the quarter system, but the poor academic student and the pre-occupational students had more success under the semester plan.

In a study involving freshmen students entering Florida State University, Kumpe (1963) attempted to compare the grades achieved and hours completed by semester students to those of subsequent trimester students. The data indicated that the overall hours completed by the trimester group were significantly down ($p \leq 0.01$), but that the grades of the trimester group were slightly but not significantly higher. However, it was not clear from the study whether the grades effect was caused by the implementation of the trimester plan or by restrictions imposed on university admissions.

The above evaluations of the extended year plans fail to establish any clear-cut pedagogic or economic advantages of the plans. Until a plan is formulated that does show advantages in these areas, it is doubtful if there will be any widespread move to extended year plans.

REORGANIZATION OF THE SCHOOL YEAR IN CANADA

Correspondence with the various provincial and territorial departments of education across Canada revealed that four of the ten provinces and both territories are using the semester system.

Ontario, Quebec, New Brunswick, Nova Scotia, Prince Edward Island and Newfoundland are using only the ten-month year plan. Ontario is at present offering a summer school program, and New Brunswick has set a committee to study school-year reorganization, but the other four provinces mentioned above have no plans at present to vary the ten month school year.

British Columbia, Alberta, Saskatchewan, Manitoba, Northwest Territories and the Yukon Territory are using the semester system. The Department of Education of British Columbia does not organize the school programs and thus no accurate count could be given concerning the number of schools on semester. However, in many cases the traditional ten month school year has been organized into semesters and trimesters. Saskatchewan has been using the semester system for two years with one hundred and ten of three hundred and ninety-eight (28%) high schools participating in the semester organization. Manitoba has also been experimenting with the semester system for two years, but only four schools representing a very small percentage of the total being involved. All five of the territorial high schools of the Northwest Territories have been using the semester system for the past year and four high schools (25% of total school population) in the Yukon Territory have been using the semester system for the past three years. (Prov. Depts. of Ed., Correspondence, 1971).

The Alberta Plans

The two major plans being used in Alberta -- the trimester and the semester -- are similar to their United States

counterparts in name only, since in the United States both are associated with extended school-year plans. The name semester is also used in the United States to designate a half-term or four and one-half months of the school-year. In the United States' system a full course is divided into two halves with each being completed in a semester.

The Alberta trimester system. The history of the trimester system has been outlined in the first chapter, therefore this section will deal with the specifics of organization and evaluation. The early literature on this system is somewhat confusing since the term 'semester' was used to describe this plan. The system is now called the 'trimester' and will be referred to as such.

The trimester system has been in operation in Red Deer since 1949. That city remains the only large Alberta center using the plan. The school-year is divided into three terms of approximately equal length as follows: (1) September 1 to December 2; (2) December 5 to March 17; and (3) March 20 to June 30. Some courses are completed in one trimester and others are extended over two trimesters. If a five credit course was taught for forty minutes a day in a traditional ten-month system, it would be taught for 120 minutes a day in the trimester system. There are three two-hour periods each day. Final grades are awarded at the end of each trimester and a student's timetable may be revised at the beginning of any new trimester. Lindsay Thurber Composite High School had been on the ten-month system prior to trying the trimester organization. A summary evaluation of the system follows: (Dawe, 1966)

1. After two years on the trimester plan, the number of students obtaining "B" or better on grade twelve departmental exams was raised from 60% to 75% and this level has been maintained.
2. A 1958 study revealed that 85% of the students favored the trimester and only 3% wished to return to the ten-month system of organization.
3. Dawe (1966) cites the following as the major advantages of the system: the nearness of the goal is motivating to the student; some credits can be obtained for part of a school year; there is opportunity for clearing prerequisites; more economical use of plant and other facilities such as reference texts; improved examination results; the opportunity is available to shift programs during the year; opportunity to mesh academic and vocational programs; avoidance of personality clashes; students were much in favour of the system.
4. The chief disadvantages are seen as the following: the three terms place a heavier burden on administrative staff; extra departmental examinations must be constructed and marked; students moving to or from the district can encounter difficulties; there can be a lapse of almost two years between sequential courses. (Dawe,

1966).

Girard (1962) and Girard and Enns (1964) compared the achievement of trimestered students in Red Deer with students on ten month plans in Medicine Hat, Lethbridge and Wetaskiwin on grade twelve departmental examinations in English, Social Studies and Mathematics. The comparison was made by means of a two-way analysis of variance of examination scores of 274 matched pairs of Red Deer and control group students. The sample was limited to those students who had progressed normally through three years of high school. The pairs were matched on the basis of grade twelve achievement scores, ability scores, and sex. Furthermore, the students compared in social studies and English were divided into low, average and high achievement groups based on their grade twelve achievement.

> The achievement between Red Deer and control students within each of these subgroups was compared by means of a two-way analysis of variance (Schools by Subjects) at each of the three levels of achievement. In no case was there any indication of significant difference in achievement between Red Deer and control students. Furthermore, in no case was there any indication of a significant interaction between schools and subjects. (Girard and Enns, 1964, p. 31).

Thus the achievement of the Red Deer students in this study was seen to be at least as good as that of the control students, but as the researchers note, they only tested those students who progressed through high school in three years. Results of student questionnaires would seem to indicate that even if no achievement gains are being made in the trimester system, there appear to be enough other inherent advantages to justify the use of the system.

It would, however, be interesting in the light of the results of this study, to analyze by what possible means the achievement gains noted by Dawe (Dawe, 1966) came about -- namely an increase of "B" or better marks from sixty percent in pre-trimester grade twelve results to seventy-five percent in the trimester grade twelve results.

A search of the literature revealed that Girard and Enns' study represents one of the only available research studies in which a controlled comparison of differing methods of school-year organization in Alberta was made. Full control is seldom possible and in this study no attempt was made to equalize the teacher variable or to account for differences due to school variables such as size, locality and adequacy of plant. Teacher variable refers to the fact that the students comprising the test sample were exposed to several different teachers whose abilities and effects could vary greatly. Girard and Enns made no attempt to neutralize or deal with this variable in their study. Girard felt that further study was needed to fully evaluate the effect of the trimester system for the gifted, the remedial and the older students. The apparent flexibility of the trimester system suggests that the needs of these special students could be more easily met in such a system than in the ten-month plan. It has been suggested that the trimester plan allows for more efficient use of school facilities, but as Girard notes, (1962, p. 67) little will be gained in efficiency of operation until the schools are operated on a full-year basis. An intensive study of divided year arrangements was carried out by the Department of Education in 1951-52. As a result of the study the semester system was seen as a preferable

arrangement to the trimester. Since then the trimester system has not spread to other schools. (Church, 1968).

The Alberta semester system. The Alberta semester system as it exists today seems to have evolved from the Red Deer trimester and the short-term arrangements adopted by some schools in 1953-54 (Forty-Ninth Annual Report, Alberta, 1954). The semester system gained impetus in 1966 when a total of thirty-two Alberta Schools were using the system (Department of Education Report, Alberta, 1968). During the 1967-68 term the Calgary high schools of Bowness, Ernest Manning, Forest Lawn and James Fowler became fully semestered along with St. Mary's High of Edmonton on an experimental basis (Calgary School Board, 1967). The results of questionnaires given in that year will be outlined later in the paper. In 1967-68, a total of ninety-six Alberta schools were operating on a semester plan, and in 1968-69 the number had risen to about one hundred and seventy -- representing about sixty percent of the high schools in the province. (Calgary School Board, September 1968). During 1969-70, two hundred and fourteen out of two hundred and ninety or seventy-four percent of the high schools were using the semester system, and during 1970-71, two hundred and twenty-one out of three hundred and four or seventy-three percent of the Alberta high schools were included. (Government of Alberta, 1971).

Most past evaluations of the semester system in this province were carried out by means of general observations and by questionnaire to students, teachers and administrators in Calgary.

The results of these questionnaires were reported at a 'semester seminar' conducted in Calgary by the Calgary School Board in April, 1968 (Calgary School Board, September 1968). A summary of these results follows:

1. Over half of the James Fowler teachers felt it was an advantage to the teacher to meet a new group of students at semester change.
2. Fewer discipline problems were noted.
3. Longer periods allowed greater use of such aids as field trips, library research, films, guest speakers, and laboratory work.
4. There was a marked improvement in school spirit and student morale.
5. Relations between staff and students were perceived to be generally more harmonious.
6. The variety of the work load was reduced at any given time, i.e. fewer courses in one semester and fewer final exams.
7. Some of the semestered schools noted many drop-ins at the beginning of the second term. Significantly, most of the drop-ins were salvaged.
8. Students generally favoured the semester plan.
9. While absenteeism was quantitatively less, any absenteeism, either teacher or student was more serious.
10. Two school openings and closings put increased pressure on administrative and office staff.
11. Gaps in continuity of sequential courses could be a problem. For example, French 10 taken in the first semester is separated by a full year from French 20 in the second semester of the next school year.

General comments (Calgary School Board, September, 1968).

1. Each school seemed well satisfied with semesters;

the students showed a strong preference for semesters, and the teachers felt the system was educationally superior to the traditional one.

2. Teacher planning, preparation and skill became more significant in the eighty minute class period. Some teachers felt the eighty minute period was too long for slow learners.

3. The eighty minute period was seen to be advantageous to Science, Mathematics, Shop and Home Economics, Physical Education, Art and some Business Education subjects. It appeared to be too long for Music, the new French program and such elective subjects as Sociology and Psychology.

4. The Calgary schools had as a whole in 1968 84.01% "B" or better in grade twelve Departmentals. The semester schools had 78.5% "B" or better achievement on grade twelve departmentals.

5. Based on the results of their evaluation, the officials of the Calgary School Board recommended that a committee of High School administrators, School Board members, and representatives of the Alberta Teachers Association be established to investigate and report on the following:

   (a) Further implementation of the semester program
   (b) A reorganized school year
   (c) Ways and means of making better use of school facilities

In an appraisal of the semester system, Church (1968) brought forth some other commonly cited advantages of the semester system:

1. Immediacy of goal is motivating to students.

2. Longer periods of study enable the teacher to alternate instruction and practice so that pupils spend less time in fruitless effort.

3. Longer periods permit a subject to be studied in depth.

4. Semester accommodates rural students who find it advantageous to enter in the second semesters because of fall harvesting responsibilities.

5. It permits the student who may be deficient in credits to complete his high school program in less than a full year.
6. It permits adult students more flexibility in picking up one or two courses.

Church further observed that the semester system has not as yet been proven superior to any other method of school-year organization. Direct observation and surveys of the opinions of students, teachers, and administrators have so far been relied upon in the face of the lack of concrete evidence concerning the merits of the semester system. Church noted that while teachers, students and administrators who have had experience with the semester system generally favor it over the traditional full year plan, some reservations do appear. French teachers have been unenthusiastic about the longer class period and administrators have questioned the semestering of acquired skill subjects such as typing, shorthand, physical education and music. Teachers of English, Social Studies, science and mathematics are generally satisfied with the system. Church concluded that "much more evidence is needed before many of the claims made for or against the semester system can be verified (Church, 1968, p. 41).

Based on a design very similar to Girard's (1962) study, Fehlberg (1968) studied student achievement under the semester system as compared to the traditional ten month system in Alberta. Fehlberg's experimental and control groups were selected from students who had written the June 1967 grade twelve departmental examinations in English 30. Only students nineteen or younger who had written the

January 1967 SCAT test were accepted (Fehlberg, 1968, p. 28). Unlike Girard's study no attempt was made to match groups on the basis of ability (Fehlberg, 1968, p. 25) although the SCAT scores were used to divide the groups into ability levels. (Fehlberg, 1968, p. 28). In applying the two-way analysis of variance procedure (ability by type of school term organization) on the data, Fehlberg found that achievement in English 30 and Mathematics 30 did not differ significantly for students of the experimental and control groups. However, in Social Studies 30 semester students achieved significantly better than traditional year students. Semester students in the top and bottom twenty-five percent of the ability ranges achieved significantly better than the traditional group. (Fehlberg, 1968, p. 47).

Fehlberg's study uncovered some small achievement differences favoring the semester system but nothing of a large enough extent to justify immediate and full acceptance of the system. Conversely, his results indicate that the students exposed to the semester system are not being adversely affected concerning achievement in the subjects tested. Fehlberg (1968, p. 51) recognizes the existence of the complicating, hard to eliminate variables such as differing teachers, differing school plants and varieties of school facilities. He suggests that subsequent studies should attempt to randomly assign the students to one system or the other and to randomly assign the other mentioned variables, but he concedes that such a practise is impractical and unfeasible because of political, economic and moral reasons. (Fehlberg, 1968, p. 51).

In a more recent study, Arnot (1969) surveyed by means

of questionnaires two hundred and fourteen principals of secondary public and separate schools in Alberta whose schools contained grades, ten, eleven and twelve. Arnot sought to determine whether there were differences between: (1) principals whose schools are completely semestered; (2) principals whose schools are partly semestered; (3) principals planning either complete or partial adoption of the semester system; and (4) principals planning not to semester, on perceived advantages and disadvantages of the semester system as compared with the conventional school-year.

Arnot treated his data by means of one-way analysis of variance followed by the Scheffe Multiple Comparison of Means test, in order to test for significant differences between mean scores on each of the forty questionnaire items that dealt with administrative advantages and disadvantages of the semester system; advantages and disadvantages of the shorter school term and longer classroom period; compatibility of the semester system with existing values and past experiences of principals, teachers and students, and the ease with which one can communicate with another concerning the semester system.

Analysis of the data revealed significant differences among the four categories of principals surveyed on twenty-six out of the forty items. Most consistent differences were found between the principals of conventional schools not planning to semester and the other three categories of principals. Items dealing with advantages of the semester system were seen as significantly greater advantages by principals working in, or perhaps committed to, the semester system than by principals not planning to use the semester system. Conversely,

principals planning not to semester saw those items dealing with disadvantages of the semester system as significantly greater disadvantages than did the principals involved in, or perhaps committed to, the semester system. As Arnot notes, it would appear that "principals who are committed to the semester system perceived only its favourable aspects whereas principals who have not semestered and do not intend to semester only perceived the unfavourable aspects of the semester system as compared with the conventional school-year." (p. 116).

Arnot also found that the principals whose schools were fully or partially semestered observed fewer semestered schools and discussed the semester system with significantly fewer numbers of administrators than did principals of conventional schools planning not to semester or principals of conventional schools planning either a complete or partial semester system. "It may be possible," Arnot suggests, "that they did not give due consideration to semestering before adopting the semester system." (p. 116). In his last implication listed, Arnot suggests that since there is a controversy regarding the perceived advantages and disadvantages of the semester system with respect to the conventional school-year, "one might expect that total disappearance of the conventional school-year in favor of some form of divided school-year will not occur in the immediate future". (p. 116).

While Arnot's study did reveal some interesting aspects of principals' perceptions of the advantages and disadvantages of the

semester system, it uncovered few if any heretofore unlisted advantages and disadvantages, and, as Arnot notes, further study is needed to determine if the difference in perception of characteristics of the semester system are only perceived or are "founded on actual differences." (p. 117). In implying that principals of semestered schools may have adopted the system without due consideration, Arnot prompts the thought that perhaps the other principals are being overly cautious and should experiment before reaching a firm decision either way. Total disappearance of the conventional school-year will undoubtedly not occur in the immediate future, but from the generally positive responses received so far from those experiencing the semester system, and because of pressures brought to bear on the Department of Education and on local school boards due to administrative problems associated with allowing large scale operation of more than one system of secondary school organization, one might expect the semester system to be present in most of the Alberta schools in the near future.

Arnot suggests that his study was in part limited because principals were asked to respond to questions that students or teachers may have answered more accurately (p. 6). The present study has surveyed the teacher and student populations of the Edmonton semester schools. A survey of teachers and students opinions was suggested by Arnot in his recommendations for further study (p. 117).

Recent Proposals for School-Year Reorganization in Alberta

Much interest has been generated in Alberta in the past five years in various plans put forth concerning a complete

reorganization of the school-year. As noted previously, similar movements have been prevalent in the United States for several years. The Alberta Teachers Association (A.T.A., April, 1968) and the Alberta School Trustees Association (A.S.T.A., 1968) put forward separate but similar plans in 1968 that would divide the school year into two equal terms. The first term would begin on August first and end on December twenty-third. The second term would begin in the first week in January and end at the end of May. These plans, and the Coutts-Bergen plan (Coutts and Bergen, 1969) are essentially the same as the present semester system with the midpoint being the Christmas vacation instead of the end of January. This system seems logical and practical and was tried out in the 1969-70 school year in Lethbridge. (Lethbridge, 1969). At present one would expect the reaction to this system to be similar to that noted for the semester system. The Coutts-Bergen plan also provides for an optional summer school program similar to the scheme that has been followed by the Edmonton Public School Board for several years.

In November of 1968, an ad hoc "Committee on Reorganization of the School Year" was formed by the Alberta Teachers Association. (A.T.A., Modified Quarter, 1968). In the resulting position paper, the committee put forth a "modified quarter system" plan that they contended, to mention only a few of the points, would have much greater flexibility with four entry and exit points; would allow more effective use of teachers, facilities and plant, would allow student-parent-teacher vacations at a variety of times, and would allow teachers the possibility of attending institutes or a full

university term without causing a salary loss. The year is divided into four quarters of approximately sixty teaching days each. Three of the quarters would make up a full year of about 180 days with teachers and students having the option of working in the fourth quarter. The "modified quarter" plan has many attractive features and most likely will be tried somewhere in Alberta in the near future. However, the full advantages of the plan could not be realized unless the post-secondary institutions were co-ordinated with it, thus allowing students to enter soon after leaving high school.

During the year 1970 the Worth Commission on Educational Planning accepted submissions from interested groups throughout the Province of Alberta with the aim of considering, evaluating, and revising the entire educational system of Alberta. The "N-12 Task Force" of the Commission was created to examine in depth the elementary and secondary schools, and in their "Interim Proposals" (Worth, 1971) suggested "that a quarterly system be tried in a few jurisdictions in Alberta so that the advantages of this system can be assessed." The "Task Force" saw the quarter system as supplying freedom and flexibility for choosing courses; allowing moves in and out for three months in any quarter; allowing teachers to use two quarters for further education; and giving a more dispersed pattern of tourism and employment over a wider period of the year, thus avoiding the congestion now experienced in July and August. As previously noted, experimentation with the quarter system in the United States has found as many disadvantages as advantages inherent in the system. However, this does not negate the

need for its experimental trial in Alberta so as to evaluate the quarter system for fulfillment of the educational needs of this province.

In summary, much has been written concerning school-year reorganization in the United States. Many different plans have been tried and some have been disgarded, but actual controlled, comparative evaluation of the conflicting plans appears to be lacking. As is the case in Canada, many of the decisions concerning the United States' plans have been made on the basis of the results of questionnaires, surveys, and interviews with teachers, students, administrators, and parents. In Canada, Alberta has been the province most actively involved in attacking the traditional ten-month school-year. The trimester and semester organizations have been tried and evaluated at least in part by acceptable research methods. Both systems have proven adequate and workable with the semester system emerging as the most popular of the two. Further evaluation of the semester system is needed at present and more will be needed in the future to justify its existence as other proposed plans come into practice. It is the intent of this study to pose and hopefully gain answers to many questions regarding the effects of the semester system upon some of the students and teachers presently operating within it in the Edmonton Public School system.

CHAPTER III

RESEARCH DESIGN AND METHODOLOGY

This study was designed to describe and summarize the opinions of students and teachers of the Edmonton Public School System concerning the semester system of school-year organization that they experienced in the 1969-70 academic year.

THE SAMPLE

During the 1969-70 school-year, five high schools of the Edmonton Public School System were operating wholly or partially on the semester system of school-year organization. The sample for this study included all the teachers and all the students of these five semesterized high schools. The sample was comprised of a total of three hundred and forty-seven teachers (347), and five thousand seven hundred and seventeen students (5,717) in grades ten, eleven and twelve.

Since the schools tested varied in size, program, and the number of years during which they had been using the semester system, a brief description of each school follows.

Description of the Schools

Jasper Place Composite High School. This is an academic and vocational high school having a population of approximately 2500 students and 120 teachers. All subjects are semestered into eighty-minute periods and a four period day. The semester

organization has been in use for two school years including the 1969-70 school-year.

Victoria Composite High School. This is an academic and vocational high school of approximately 2500 students and 120 teachers. Most subjects are semestered. Non-semestered subjects include some vocational, music and slow learner subjects. The semester organization has been in use for two school years including the 1969-70 school year.

Queen Elizabeth Composite High School. This is an academic high school with some business education subjects with a population of approximately 1500 students and seventy-five teachers. Some subjects are semestered and some classes of the same subjects are non-semestered. The semester organization was used for about half of the classes for the first time in the 1969-70 school year.

McNally Composite High School. This is an academic high school with some business education and industrial arts subjects with a population of approximately 1300 students and sixty teachers. About eighty percent of the subjects are semestered, with English 13, Social Studies 13, Mathematics 15, Science 11, and Music being non-semestered. The semester organization was used for the first time during the 1969-70 school year.

Strathcona Semester School. This is a special school designed to meet the needs of adults and students who wish to gain high school requirements by completing one or more subjects which

they lack. Strathcona Semester has a population of approximately 250 students and fourteen teachers. All subjects are semestered. The semester system has been employed for the older students and adults for three years including the 1969-70 school year.

THE INSTRUMENTS

Separate opinionnaires were administered to teachers and students. The opinionnaires were originally formulated by Mr. T. J. Sawchuk, who was principal of Jasper Place Composite High School in 1968, and his administrative staff. The format of the opinionnaires included questions or modifications of questions found in related studies carried out in Calgary and other parts of the province (Calgary School Board, 1968).

Teacher Opinionnaire Re Semestering

The questions were not categorized by the creators of the opinionnaire, thus when this writer began analyzing the results of the Edmonton study, it soon became apparent that for clarity and ease of analysis the questions could be divided into categories. The categories finally decided upon were chosen because most items could be grouped within them, and because they emphasized broad areas of interest to the writer. The questions included in the teachers' opinionnaire were categorized by this researcher as follows:

	CATEGORY	QUESTION NUMBERS
T1.	PERSONAL INFORMATION -- questions concerning years of training, years of experience in semestered and unsemestered schools.	1, 2, 3, 4.
T2.	TEACHING PROCESS -- questions concerning effects of semestering on preparation time, flexibility of approach, etc.	5, 6, 9, 10, 11, 12, 17, 18, 20, 23.
T3.	IMPACT ON STUDENT -- questions dealing with the effects of semestering on student measures such as achievement, homework assigned, etc.	7, 8, 13, 21, 22, 24, 28.
T4.	80 MINUTE PERIOD -- questions concerning the effects of the 80 minute period used in the semester system.	30 to 53.
T5.	MISCELLANEOUS --	14, 15, 16, 19, 25, 26, 27, 29.

The teacher opinionnaire included a total of fifty-three multiple-choice items. There were forty-one four-part items, eight three-part items and four five-part items. The teachers recorded their choices on answer sheets which were machine scored. The original design of the opinionnaire included questions one to four dealing with personal information including years of training; total years of teaching experience; years of teaching experience at the secondary level on a full year system; and years of teaching under the semester system. Questions five to twenty-nine dealt with a variety of aspects of the semester and full year plans. Questions thirty to fifty-three dealt with implications of the eighty minute period used under the semester system. As previously mentioned, the

items were further categorized by the writer.

The students' opinionnaire was also originally uncategorized. The categories below were chosen because of their appropriateness to groups of questions contained on the opinionnaire and to coincide with the categories of the teacher opinionnaire. By similarly categorizing the teachers' and students' opinionnaires, a comparison of clusters of teachers' opinions were easily compared with clusters of students' opinions to items of similar intent. The questions included in the students' opinionnaire were categorized by the researcher as follows:

Student Opinionnaire Re Semestering

	CATEGORY	QUESTION NUMBERS
S1.	PERSONAL INFORMATION --	1 to 12.
S2.	TEACHER PRESENTATION -- questions dealing with alterations in teacher presentation as a result of the semester system.	19, 20, 30, 35.
S3.	IMPACT ON STUDENT -- questions concerned generally with the effects of semestering on students work load, achievement, etc.	13, 14, 15, 16, 17, 18, 21, 22, 23, 24, 28, 29, 34, 36, 38, 42.
S4.	80 MINUTE PERIOD --	44 to 58.
S5.	MISCELLANEOUS --	25, 26, 27, 31, 32, 33, 37, 39, 40, 41, 43.

The student opinionnaire included a total of fifty-eight multiple-choice items. There were forty-five four-part items,

seven three-part items, four five-part items, and two two-part items. The students recorded their choices on answer sheets which were machine scored. The original design of the opinionnaire included questions one to twelve that dealt with personal information; questions thirteen to forty-three concerning a variety of aspects of the semester and full year plans; and questions forty-four to fifty-eight that dealt with implications of the eighty minute period. As with the teachers opinionnaire, the items were further categorized by the writer.

COLLECTION OF THE DATA

The opinionnaires were delivered to the principals of the five high schools involved in the study. Only the teachers and students who were involved in the semester system in one or more subjects were asked to complete the opinionnaires. The opinionnaires were administered during one regular class period, and on completion were returned to the Data Processing Office of the Edmonton Public School Board for the initial data analysis.

TREATMENT OF THE DATA

Scoring

The items of the opinionnaire had three, four, or five response options. Subjects were asked to choose one response option for each item on the opinionnaire. Responses were recorded in HB pencil on a standard answer sheet designed to be machine scored.

Research Hypotheses

The following hypotheses were tested:

Hypothesis 1 -- There are no significant differences among the opinions of the teachers across the five schools being tested on each of the items of the opinionnaire.

Hypothesis 2 -- There are no significant differences among the opinions of the students across the five schools being tested on each of the items of the opinionnaire.

Hypothesis 3 -- There are no significant differences between the opinions of the teachers and the students of each of the five schools individually on the items of similar intent on the teacher and student opinionnaires.

The null hypothesis was assumed in all tests of significance. The level of significance adopted for all tests was $p \leq 0.01$.

Statistical Treatment

The initial analysis carried out by the Data Processing department of the Edmonton Public School Board consisted of the calculation of proportions of respondents choosing a particular item option. The results were recorded for each of the five schools separately and in total for both the teacher and student opinionnaires. These original results are contained in Appendix A.

To facilitate making comparisons between the responses of the five groups of teachers and the five groups of students, the chi-square statistic was calculated to test for significant differences between the responses of the groups on the items analyzed. The details of the comparisons made will be elaborated upon below.

The intent of the writer was to make the study descriptive of the opinions of students and teachers concerning the semester system in the Edmonton Public High Schools. The need for some means of establishing the significance of the differing opinions recorded soon became apparent. The "chi-square test for two independent samples" was selected. Siegel suggests that "when the data of research consist of frequencies in discrete categories the chi-square may be used to determine the significance of differences between two independent groups". (1956, p. 104).

The chi-square (χ^2) test for two independent samples provides a measure of the discrepancy between the observed and theoretical frequencies with which the members of the two independent groups fall into various categories. The chi-square is computed as follows:

$$\chi^2 = \sum_{i=1}^{r} \sum_{j=1}^{k} \frac{(Oij - Eij)^2}{Eij}$$

where Oij = the observed number of cases categorized in the i-th row of the j-th column.

Eij = the number of cases expected under the null hypothesis to be categorized in the i-th row of the j-th column.

$\sum_{i=1}^{r} \sum_{j=1}^{k}$ - directs one to sum over all (r) rows and all (k) columns i.e. to sum over all cells.

The data for this study were arranged in two-way tables. The expected frequencies for each cell of the tables were computed by multiplying the two marginal totals common to a particular cell and by dividing by the total number of cases, N. If the observed frequencies were found to be in close agreement with the expected

frequencies, the difference between the two would also be small, resulting in a small chi-square. Larger differences would result in relatively larger chi-squares. The larger the chi-square, the more likely it would be that the two groups differ with respect to item being tested. (Siegel, 1956, p. 106).

CHAPTER IV

RESULTS & DISCUSSION

INTRODUCTION

To establish whether the opinions of teachers and students tend generally to show acceptance or rejection of the semester system, the original results recorded in percentages and grouped in the previously listed categories are listed and examined. In this very simple analysis of opinion trends it is primarily noted whether a higher percentage of subjects responding to a particular item favored the situation under the ten-month all year plan or under the semester system.

Having gained a rough measure of the overall teacher and student opinions of the semester system, some measure of the significance of opinion differences between the various groups represented was desired and were arrived at by means of the calculation of the Chi Square statistic.

THE OPINION TRENDS OF THE TEACHER AND STUDENT SAMPLES

Item Categories

The items of the teacher opinionnaire were categorized under headings as follows:

Category T1 -- Personal Information -- Items 1 to 4

Category T2 -- Teaching Process -- Items 5, 6, 9, 10, 11, 12,

17, 18, 20, 23

Category T3 -- Impact on the Student -- Items 7, 8, 13, 21, 22, 24, 28

Category T4 -- The Eighty-Minute Period -- Items 30 to 53

Category T5 -- Miscellaneous -- Items 14, 15, 16, 19, 25, 26, 27, 29

The items of the student opinionnaire were categorized under headings as follows:

Category S1 -- Personal Information -- Items 1 to 12

Category S2 -- Teaching Presentation -- Items 19, 20, 30, 35

Category S3 -- Impact on Student -- Items 13 to 18, 21 to 24, 28, 29, 34, 36, 38, 42

Category S4 -- The Eighty-Minute Period -- Items 44 to 58

Category S5 -- Miscellaneous -- Items 25, 26, 27, 31, 32, 33, 37, 39, 40, 41, 43

A more detailed explanation of these categories is presented in Chapter III.

Analysis of Data

Categories T1 and S1 -- Personal Information. The items in these categories elicited personal information from the teachers and students. The information was of interest to the Edmonton Public School Board, but was not seen as important to this study. The results of these items are included for information in the opinionnaires in Appendix A.

Category T2 -- Teaching Process. Table I presents the results of the items concerned with the teaching process of the classroom teacher. An examination of Table I reveals the following:

1. Items 9, 10, 11, 12, 17, 18 -- In all of these items the semester system was seen to be advantageous by an average of 40% of the teachers (range from 31% to 49%). An average of 11% (range from 8% to 18%) of the teachers responded negatively and 26% (range from 9% to 34%) found the semester system to be no different than the ten-month year on these items.

2. Items 5 and 6 suggest that semestering requires more work from the teachers. A greater amount of time was needed for lesson preparation by 39% of the teachers (Less Time -- 6%, No Diff. -- 37%). The marking load in semestered classes was greater for 29% of the teachers, less for 10% and no different than the ten-month year for 42%.

3. Item 20 -- Sixty-one percent of the teachers felt that more audio-visual equipment was needed because of semestering, while 23% felt more was not needed.

4. Item 23 -- Fifty-two percent of the teachers felt that their instruction was more intensive in semestered classes (Less Intensive -- 5%, No Diff. -- 26%).

Category S2 -- Teacher Presentation. Table II presents the results of the items on the student opinionnaire concerned with the lesson presentation of their teachers. An examination of Table II reveals the following:

1. Items 19 and 20 -- Twenty-six percent of the students felt

TABLE I

ITEMS FROM TEACHER OPINIONNAIRES

CONCERNING THE "TEACHING PROCESS" (CATEGORY T2)

Item No.	Under the Semester System:	Results	%
5	The amount of time required for your lesson preparation has been	Greater	39
		Less	6
		No Different	37
6	Your marking load has been	Greater	29
		Less	10
		No Different	42
9	In regard to individual attention to students you have been able to give them	More	49
		Less	9
		No Different	27
10	In facilitating the understanding of subject-matter concepts (basic principles, generalizations, relationships, etc.) semestering has been	An Aid	46
		A Hindrance	8
		No Different	29
11	As far as mastering factual material semestering has been	An Aid	38
		A Hindrance	10
		No Different	34
12	In facilitating creativity semestering has been	An Aid	33
		A Hindrance	9
		No Different	29
17	If you are teaching a skill subject do you find semestering	Superior	31
		Inferior	12
		No Different	9
18	Does semestering give you an opportunity to enrich a course	Yes	43
		No	18
		No Different	25
20	Do you feel that more A-V equipment is needed because of semestering	Yes	61
		No	23
23	Because of semestering your instruction is	More Intensive	52
		Less Intensive	5
		No Different	26

TABLE II

ITEMS FROM STUDENT OPINIONNAIRES

CONCERNING TEACHER PRESENTATION (CATEGORY S2)

Item No.	Item Wording	Results	%
19	In regards to individual attention in academic subjects do you feel teachers give	More	26
		Less	19
		The Same	38
		No Opinion	15
20	In regards to individual attention in technical subjects do you feel teachers give	More	19
		Less	6
		The Same	18
		No Opinion	54
30	Do you find courses more enriched and fuller in semesters?	Yes	47
		No	21
		No Different	21
35	Because of semestering do you find instruction	More Intensive	53
		Less Intensive	8
		The Same	30

they were receiving more individual attention in academic subjects and 19% of the students felt that semestering was providing more individual attention for them by the teachers in technical subjects. However, 19% of the students felt they were receiving less individual attention in academic subjects, while 6% of the students felt this in the technical subjects. Thirty-eight percent and 18% of the students felt the situation was the same as it was in the ten-month year in the academic and technical subjects respectively. It should be noted that 54% of the students had no opinion concerning the technical subjects due mainly to the fact that only two of the five schools surveyed offer these subjects.

2. Item 30 -- The students agreed with the teachers that courses were more enriched under the semester system. Forty-seven percent of the students registered an affirmative response while 21% found the courses less enriched and 21% found them no different because of semestering.

3. Item 35 -- Here too the students agreed strongly with the teachers as 53% of the students felt that semestering resulted in a more intensive type of instruction. Eight percent felt it was less intensive and thirty percent felt instruction was about the same as under the ten-month year.

Summary and Discussion of Categories T2 and S2

The responses of the teachers and students to items in Categories T2 and S2 show general agreement. Both teachers and students felt that under the semester system more individual attention is

possible. Forty-nine percent of the teachers believed this to be so, and 26% of the students saw this to be true in academic subjects, while 19% of the students agreed that in technical subjects more individual attention was also prevalent under the semester system. Forty-three percent of the teachers felt that the semester system gave them more of an opportunity to enrich a course, and 47% of the students agreed that the semestered courses were more enriched and fuller. Both groups felt that semestering resulted in more intensive instruction, as 52% of the teachers and 53% of the students indicated thusly.

The teachers found that more time was needed for lesson preparation and marking, while more audio-visual equipment was needed to provide some instructional variety during the longer classes. Some teachers also tended to feel that the semester system was superior in facilitating subject-matter concepts (46% agree), in mastering factual material (38% agree), in facilitating creativity (33% agree), and in teaching skill subjects such as typing (31% agree). On the nine teachers' items contained in the category an average of 28% (range from 9% to 42%) of the teachers felt that the situation under the semester system was no different than under the ten-month year, while on the four students' items, an average of 27% of the students (range from 18% to 38%) expressed this feeling. On the items eliciting a positive or negative response to the semester system, positive responses were given by an average of 40% (range from 31% to 49%) of the teachers and 31% (range from 19% to 47%) of the students. Negative responses were given by an average of 11% (range from 8% to

18%) of the teachers and 15% (range from 6% to 21%) of the students. From the results of this section the semester system would appear to be superior to the ten-month year on the items considered. A high percentage of teachers (28%) and students (27%) felt that there is little difference between the semester system and the ten-month year on these items.

Category T3 -- The Impact on the Student. Table III presents the results of the items concerned with the teachers' opinions of the impact of the semester system on the student. An examination of Table III reveals the following:

1. Items 7, 8, 21, 22, 24 -- An average of 27% (range from 15% to 33%) of the teachers found semestering to be advantageous, an average of 11% (range from 5% to 17%) found it to be disadvantageous, and an average of 38% (range from 35% to 41%) found conditions to be no different under a semester plan than under the ten-month plan on these items.

2. Item 13 -- Under the semester plan a student may finish his high school program in 2½ years. Some feel that this could limit the students' educational growth since they feel that less overall educational affect results in the 2½ years than previously resulted in 3 or 4 years of high school. Twenty-four percent of the teachers felt that this effect was of major concern, 37% felt it was of minor concern, while 25% felt it was of no concern.

3. Item 28 -- Missing classes in a course may result in a student getting behind very quickly, causing him to drop the course. Sixty-six percent of the teachers considered this problem to be

TABLE III

ITEMS FROM TEACHER OPINIONNAIRE

CONCERNING IMPACT ON STUDENT (CATEGORY T3)

Item No.	Under the Semester System:	Results	%
7	The students have put forth	More Effort in Class	33
		Less Effort in Class	7
		No Change	36
8	The students have put forth	More Effort in Homework	15
		Less Effort in Homework	17
		No Change	39
13	Because semestering may permit a student to complete his high school education in 2½ years possibly limiting his educational growth, this is	Of Major Concern	24
		Of Minor Concern	37
		Of No Concern	25
21	Semestering has affected the attendance of pupils	Positively	25
		Negatively	16
		No Change	35
22	Because of semestering student achievement appears	Greater	32
		Less	8
		No Different	39
24	Since goals for students are more immediate because of semestering their study habits have been	Better	29
		Worse	5
		No Different	41
28	When a student misses several days he may want to drop the course because he is so far behind the class. Do you feel that the accelerated program of this system accentuates this problem?	Yes	66
		No	22

accentuated by the longer periods and the more intensive instruction characteristic of the semester system, while 22% felt that semestering did not accentuate this problem.

Category S3 -- Impact on Student. Table IV presents the results of the items on the student opinionnaire concerned with the impact of the semester system on the student. An examination of Table IV reveals the following:

1. Items 15, 16, 21, 22, 28, and 29 -- The semester system was seen to be advantageous on these items by 36% (from 20% to 55%) of the students, disadvantageous by 13% (from 7% to 21%) and no different than the ten-month year by 29% (from 15% to 36%).

2. Items 13, 14, 17, 18, 36, and 38 -- The semester system seems to be requiring the students to do more work in some areas and less in others. Only 19% of the students felt that more time was required to prepare for examinations, while 24% felt less time was needed, and 39% detected no difference compared to the ten-month year. The overall work load was seen as greater by 25% of the students, less by 30% and no different by 35%, while homework in technical subjects was seen to be greater by 6% of the students, less by 13% and no different by 18% (59% had no opinion). However, in academic subjects 35% of the students felt that there was a greater amount of homework being assigned while 15% felt there was less and 33% saw no difference. Thirty-one percent of the students felt that they had developed better study habits under semestering, while 18% saw them to be worsened and 42% reported no difference. The overall strain placed on the students was reported to be greater by 39% of the students, less by 22% and no

TABLE IV

ITEMS FROM STUDENT OPINIONNAIRE

CONCERNING IMPACT ON STUDENT (CATEGORY S3)

Item No.	Under the Semester System:	Results	%
13	Do you find the time required for exam preparation in the semester system is	Greater	19
		Less	24
		No Different	39
14	Is your work load	Greater	25
		Less	30
		No Different	35
15	Do you feel that you can put forth in class	More Effort	55
		Less Effort	7
		No Different	27
16	Do you feel that you put forth in homework	More Effort	44
		Less Effort	12
		No Different	33
17	Is the amount of homework in academic subjects	Greater	35
		Less	15
		No Different	33
18	Is the amount of homework in technical subjects	Greater	6
		Less	13
		No Different	18
		No Opinion	59
21	Do you find concept comprehension courses	Easier	30
		Harder	20
		No Different	30
22	Do you find learning factual material	Easier	32
		Harder	21
		No Different	36
23	Because you may finish your schooling in 2½ years do you feel that this limits your overall educational growth?	Yes	10
		No	58
		Furthers It	14

TABLE IV (continued)

ITEMS FROM STUDENT OPINIONNAIRE

CONCERNING IMPACT ON STUDENT
(CATEGORY S3)

Item No.	Under the Semester System:	Results	%
28	In a skill subject (e.g. Typing) do you find the learning situation to be	Superior	20
		Inferior	7
		No Different	15
		Not Applicable	16
		No Opinion	39
29	In an academic subject do you find the learning situation to be	Superior	37
		Inferior	10
		No Different	31
		Not Applicable	4
		No Opinion	15
34	Do you feel that attendance in semestering is	More Necessary	65
		Less Necessary	10
		No Different	18
36	Do you feel that your study habits in semestering are	Better	31
		Worse	18
		No Different	42
38	Do you feel that the strain on pupils because of semestering is	Greater	39
		Less	22
		No Different	29
42	You have missed several successive days. You may want to drop the subject because of missed material. Does semestering accent this problem?	Yes	52
		No	24

different by 29% compared to the ten-month year.

3. Item 23 -- The semester system allows some students to finish high school in two and one-half years, but 58% of the students did not see this as limiting their overall educational growth, while 10% felt their growth could be limited, and 14% felt that it could be enhanced by this effect.

4. Items 34 and 42 -- Missing classes is more serious under the semester system since the classes are twice as long and presumably more material is covered in each class. Fifty-two percent of the students considered the semester system to be accentuating the problem of missing classes, falling behind and thus wishing to drop the course. Twenty-four percent did not think that the semester system accentuates this problem. The results of item 34 reiterate the need for regular attendance in a semester subject as 65% of the students felt attendance to be more necessary than it was under a ten-month year.

Summary and Discussion of Categories T3 and S3

While it was shown in the results of the previous category that the teachers felt that more work was required in preparing examinations and lessons under the semester system, the results of this section reveal that the students indicated that they were required to work less under the semester system. Twenty-four percent of the students reported that less time was spent in examination preparation (19% spend more and 39% find no difference) and 30% of the students reported that their overall work load was lessened (25% found it

increased and 35% found no difference) under the semester system. Teachers and students agreed that the students had put forth more effort in semestered classes (agreed by 33% of teachers and 55% of students). However, 17% of the teachers felt that the students put forth less effort in homework (More effort -- 15%, No Diff. -- 39%) while 44% of the students felt that they had put forth more effort (Less -- 12%, No Diff. -- 33%). Thirty-five percent of the students felt that there was more homework in academic subjects (Less -- 15%, No Diff. -- 33%) while 13% of the students felt that there was less homework in the technical subjects (More -- 6%, No Diff. -- 18%, No Opinion -- 59%).

In the previous category the teachers indicated that the semester system was considered to be advantageous in concept comprehension, in factual learning, and in skill subjects. Thirty percent of the students found concept comprehension easier (Harder -- 20%, No Diff. -- 30%), 32% found learning factual material easier (Harder -- 21%, No Diff. -- 36%), and 20% found the learning situation in skill subjects to be superior (Inferior -- 7%, No Diff. -- 15%, Not Applicable and No Opinion 55%) under the semester system. The students also reported that in the academic subjects generally, the learning situation was superior (Superior -- 37%, Inferior -- 10%, No Diff. -- 31%). The results reported in the previous categories would seem to have a bearing on the results noted in this category. The teachers reported that semestering has allowed them to give the students more individual attention, and to offer fuller, more enriched courses, which could presumably have improved the classroom situation concerning

concept comprehension, factual learning, etc.

Fifty-eight percent of the students gave the opinion that finishing high school in two and one-half years would not limit their educational growth, (10% felt it would), while 37% of the teachers saw this as a problem of minor concern (Major Concern -- 24%, Of No Concern -- 25%). The semester system was seen to accentuate the problem of falling behind to the point of dropping a course if excessive classes are missed. Because of the fact that the periods are twice as long with presumably twice as much material being covered on the average per period, 66% of the teachers and 52% of the students saw the necessity of regular attendance in semestered classes. Although 39% of the students felt that semestering put a greater strain on them, (Less -- 22%, No Diff. -- 29%), this strain did not seem to be having a detrimental affect on their attendance and achievement. Twenty-five percent of the teachers reported that semestering had affected attendance positively, (Negatively -- 16%, No Diff. -- 35%) and 32% felt that student achievement was improved (Lessened -- 8%, No Diff. -- 39%).

On the five teachers' items eliciting a positive or negative response in this category, four of the items (80%) received a positive response from the teachers, and of the thirteen students' items eliciting positive or negative responses, eleven (85%) received positive responses from the students. Positive responses were given by an average of 27% (range from 17% to 33%) of the teachers and 29% (range from 13% to 55%) of the students. Negative responses were given by an average of 10% (range from 5% to 16% of the teachers and 18% (range

from 6% to 39%) of the students.

The feeling that the situation under the semester system is no different than under the ten-month year was expressed by 38% (range from 35% to 41%) of the teachers and 30% (range from 15% to 39%) of the students. The results of this category also lean positively towards the semester system and, as was the case in the previous category, a substantial percentage of teachers (38%) and students (30%) felt that the situation was much the same under the semester system as it was under the ten-month year.

Category T4 -- The Eighty-Minute Period. Table V presents the results of the items concerned with the effects of the eighty-minute period being used in the Alberta semester system. An examination of Table V reveals the following:

1. Items 30, 31, 32 -- For the teacher, the above average and the average student the eighty-minute periods were seen to be of satisfactory length by an average of 69% (from 65 to 73%) of the teachers, too long by an average of 16% and too short by an average of 2%.

2. Item 33 -- The eighty-minute period was seen as being too long for the below average student by 63% of the teachers, of satisfactory length by 21% and too short by 5%.

3. Items 36, 38 to 45, 48 and 51 -- The eighty-minute period was reported to be advantageous by an average of 34% of the teachers, 7% found it to be disadvantageous, and 35% found no difference on these items compared to the ten-month year.

4. Items 34 and 35 again point out that many teachers felt

TABLE V

ITEMS FROM TEACHER OPINIONNAIRE

CONCERNING THE EIGHTY-MINUTE PERIOD (CATEGORY T4)

Item No.	Item	Results	%
30	For you, the teacher, the 80 minute periods are	Of Satisfactory Length	69
		Too Long	17
		Too Short	1
31	For the above-average student, the 80 minute periods are	Of Satisfactory Length	73
		Too Long	9
		Too Short	4
32	For the average student the 80 minute periods are	Of Satisfactory Length	65
		Too Long	21
		Too Short	1
33	For the below-average student the 80 minute periods are	Of Satisfactory Length	21
		Too Long	63
		Too Short	5
34	The amount of your lesson preparation has been	Greater	48
		Less	5
		No Different	31
35	Your marking load has been	Greater	31
		Less	13
		No Different	39
36	The students have put forth in class	More Effort	31
		Less Effort	8
		No Change	39
37	The students have put forth in homework	More Effort	14
		Less Effort	16
		No Change	43
38	In maintaining discipline in class the 80 minute period has been	Advantageous	13
		Detrimental	12
		No Different	60

TABLE V (continued)

ITEMS FROM TEACHER OPINIONNAIRE

CONCERNING THE EIGHTY-MINUTE PERIOD
(CATEGORY T4)

Item No.	Item	Results	%
39	In regard to individual attention to students you have been able to give them	More	52
		Less	5
		No Different	26
40	You have used audio-visual equipment	More	43
		Less	3
		No Different	35
41	You have used the library facilities	More	22
		Less	5
		No Different	49
42	You have been able to make use of outside resources (field trips, speakers, etc.)	More	29
		Less	6
		No Different	35
43	In class presentation you are	More Flexible	59
		Less Flexible	4
		No Different	20
44	You were able to get to know your students	Better	41
		Not as Well	11
		No Different	31
45	If you are teaching a skill subject the 80 minute period is	Superior	37
		Inferior	8
		No Different	8
46	Does teaching in the 80 minute period require more A-V equipment?	Yes	59
		No	19
47	Does an 80 minute period encourage the use of student discussion groups, committee work, research projects, etc.?	Yes	72
		No	4
48	The 80 minute period tends to help students achieve	Better Grades	29
		Lower Grades	2
		No Different	41

TABLE V (continued)

ITEMS FROM TEACHER OPINIONNAIRE

CONCERNING THE EIGHTY-MINUTE PERIOD (CATEGORY T4)

Item No.	Item	Results	%
49	In the 80 minute period instruction is	More Intensive	44
		Less Intensive	8
		About the Same	32
50	Teaching is most demanding on a teacher's nervous energy. The 80 minute period is	More of a Strain	42
		Less of a Strain	14
		No Different	29
51	The 80 minute period has affected the attendance of pupils	Positively	23
		Negatively	16
		No Change	38
52	Do you feel that inappropriate behavior (such as truancy, skipping classes, extreme "doodling" on desks, wandering in the hallways, dropping out of school) is caused by the 80 minute period?	Yes	16
		No	57
53	When a student misses several days he may want to drop the course because he is so far behind the class. Do you feel that the 80 minute period accentuates this problem?	Yes	55
		No	26

that the eighty-minute period led to increased lesson preparation time and marking load.

5. Item 37 -- Although 43% of the teachers reported no change in effort put forth in homework in an eighty-minute period, 16% felt that there was less effort, and 14% more effort.

6. Item 46 -- Fifty-nine percent of the teachers reported that more audio-visual equipment was required because of the eighty-minute period.

7. Item 47 -- Seventy-two percent of the teachers reported that the eighty-minute period encourages discussion groups, committee work, etc.

8. Items 49 and 50 -- Forty-four percent of the teachers felt that instruction was more intensive in the eighty-minute period, (Less -- 8%, No Diff. -- 32%) and that more of a strain was put onto the teacher by the eighty-minute period (More -- 42%, Less -- 14%, No Diff. -- 29%).

9. Item 52 -- Only 16% of the teachers felt that inappropriate behavior such as truancy, skipping classes, dropping out of school, etc., was directly caused by the eighty-minute period (No -- 57%).

10. Item 53 -- The eighty-minute period was seen to accentuate the problems arising from missing classes, falling behind and wishing to drop out by 55% of the teachers (No -- 26%).

Category S4 -- The Eighty-Minute Period. Table VI presents the results of the items on the student opinionnaire concerned with the eighty-minute period being used in the semester system. An examination of Table VI reveals the following:

TABLE VI

ITEMS FROM STUDENT OPINIONNAIRE

CONCERNING THE EIGHTY-MINUTE PERIOD
(CATEGORY S4)

Item No.	Item	Results	%
44	For the above-average student, do you feel class periods are	Too Long	24
		Too Short	5
		Satisfactory	56
45	For the average student, do you feel the class periods are	Too Long	27
		Too Short	3
		Satisfactory	59
46	For the below-average student do you feel the class periods are	Too Long	43
		Too Short	10
		Satisfactory	34
47	Do you feel that the longer period provides more opportunity for students to work at their own speed?	Yes	58
		No	26
48	Do you feel that the amount of work is	Greater	48
		Less	11
		No Different	33
49	Do you feel that your attention in the 80 minute class is	Greater	18
		Less	37
		The Same	35
50	For unassigned periods do you find the 80 minute period	Better	41
		Worse	17
		No Different	16
51	Do you find that in the 80 minute period behavior is	Better	19
		Worse	25
		No Different	45
52	Do you find the homework load in the 80 minute period	Greater	31
		Less	25
		No Different	34
53	The longer period allows library facilities to be used	More	52
		Less	10

TABLE VI (continued)

ITEMS FROM STUDENT OPINIONNAIRE

CONCERNING THE EIGHTY-MINUTE PERIOD (CATEGORY S4)

Item No.	Item	Results	%
		No Different	21
54	With a longer period, do you feel that outside resources such as field trips, speakers, etc., could be used	More	77
		Less	4
		The Same	8
55	Do you feel that the longer period encourages the use of student discussion groups, committee work, research projects, independent study, and so on?	Yes	69
		No	11
56	Do you feel that the longer period tends to allow you to achieve	Better Grades	37
		Lower Grades	10
		No Different Grades	39
57	Do you feel that the longer period generally affected your attendance	Positively	33
		Negatively	15
		No Change	38
58	Do you feel that the longer period has resulted in inappropriate behavior such as absenteeism, inattention and vandalism?	Yes	25
		No	33
		Of No Consequence	19

1. Items 44, 45 and 46 -- The eighty-minute period was reported to be of satisfactory length for the above average student by 56% of the students responding. However, 24% thought it was too long and 5% thought it was too short for the above average. Fifty-nine percent of the students felt that the eighty-minute period was of satisfactory length, 27% felt it was too long, and 3% thought it was too short for the average student. In contrast, 34% of the students reported that the eighty-minute period was of satisfactory length for the below-average student, while 43% felt it was too long and 10% felt it was too short for the below-average.

2. Items 47, 50, 53, 54, 55, 56, 57, and 58 -- The eighty-minute period was reported to be advantageous by an average of 50% (from 33% to 77%) of the students, to be disadvantageous by an average of 15% (from 4% to 26%) of the students and to be no different than the 40-minute period used under the ten-month plan by 24% (from 8% to 39%) of the students on these items. The results of these items all showed favor towards the semester system and were concerned with the opportunity of students being able to work at their own speed, unassigned periods, the use of the library facilities and outside resources such as guest speakers and field trips, the use of student discussion groups, committee work, research projects, etc., and student achievement, attendance and behavior.

3. Items 48, 49, 51, and 52 -- The eighty-minute period appears to be disadvantageous from the results of these items. Forty-eight percent of the students felt that they had to do more work because of the eighty-minute period (Less -- 11%, No Diff. -- 33%);

37% felt that their attention was less in the eighty-minute period (Greater -- 18%, No Diff. -- 35%); 25% felt that behavior was worse in the eighty-minute period (Better -- 19%, No Diff. -- 45%); while 31% felt that the eighty-minute period resulted in more homework (Less -- 25%, No Diff. -- 34%).

Summary and Discussion of Categories T4 and S4

Sixty-nine percent of the teachers reported that the eighty-minute periods were of satisfactory length for their purposes, and that they agreed with the students concerning the appropriateness of the longer period for the students of varying ability. Seventy-three percent of the teachers and 56% of the students felt that the eighty-minute periods were of satisfactory length for the above-average student (Too Long: Teachers -- 9%, Students 24%). Sixty-five percent of the teachers and 59% of the students concurred for the average student (Too Long: Teachers -- 21%, Students -- 27%). For the below-average student, the eighty-minute period was seen as too long by 63% of the teachers and 43% of the students, while 21% of the teachers and 34% of the students felt it was of satisfactory length for this group.

The students found that the eighty-minute period provided them with more opportunity to work at their own speed (58% agree), but that it also produced greater amounts of work (48% agree). The teachers also found more work in lesson preparation (48% agree) and marking (31% agree), and that the students generally put forth more effort in class (38% agree). However 16% of the teachers felt that less effort

was put into homework by the students, while 14% reported that more effort resulted and 43% saw no change compared to the ten-month year. Thirty-one percent of the students reported a greater homework load, but 25% thought that there was less and 34% saw no difference in the amount of homework assigned in the eighty-minute periods.

Discipline can be a problem in a longer period, and 25% of the students felt that behavior was worse in the eighty-minute period (Better -- 19%, No Diff. -- 45%), while 60% of the teachers felt that discipline problems were no different in the eighty-minute period than in the shorter periods. Thirty-three percent of the students felt that the eighty-minute period had not been the cause of absenteeism, vandalism, etc., (Yes -- 25%), and 57% of the teachers agree. The attendance of students in classes was seen to be positively affected by the longer periods by 23% of the teachers (Negatively -- 16%, No Diff. -- 38%) and 33% of the students (Negatively -- 15%, No Diff. -- 38%).

The eighty-minute period required and allowed the use of more audio-visual equipment by the teachers (59% agree), more discussion groups, committee work, etc., (Teachers: Yes -- 72%, Students: Yes -- 69%), more outside resources such as speakers, and field trips (Teachers: Yes -- 29%, Students: Yes -- 77%) and more use of library facilities (Teachers: Yes -- 22%, No Diff. 59%, Students: Yes -- 52%).

In the classroom 37% of the students felt that they paid less attention because of the eighty-minute period. However, 37% of the students and 29% of the teachers attribute higher grades to the eighty-

minute period. As was the case in previous sections, the teachers felt that instruction in the longer period was more intensive (44% agree) and more demanding on their nervous energy (42% agree). The longer period allowed the teacher to give more individual attention to the students (52% of teachers agree) and allowed the teacher to get to know his students better (41% agree). The eighty-minute period allowed the teacher to be more flexible in his approach (59% of teachers agree) resulting in among other things, the need for more audio-visual equipment (59% of teachers agree). Finally, 37% of the teachers felt that the eighty-minute period was superior for teaching a skill subject such as typing.

Of the twenty-four items in the teachers' part of this category, seventeen (71%) were answered in favor of the eighty-minute period. Of the fifteen items in the students' part of this category, ten (67%) were answered in favor of the eighty-minute period. On the items eliciting a positive or negative response to the eighty-minute period, positive responses were given by an average of 35% (range from 5% to 73%) of the teachers and 41% (range from 11% to 77%) of the students. Negative responses were given by an average of 21% (range from 2% to 68%) of the teachers and 25% (range from 4% to 53%) of the students. The feeling that the situation under the eighty-minute period is no different than under the shorter periods of the ten-month year was expressed by an average of 35% (range from 8% to 60%) of the teachers and 29% (range from 8% to 45%) of the students. Although the results of this category show a preference for the eighty-minute period used in the semester system compared to the shorter periods used in the ten-

month year, the negative responses were much higher than in the previous two categories (Negatives: T2 -- 11%; S2 - 15%; T3 -- 10%; S3 - 18%). Again also, there was a high percentage of responses indicating the feeling that the semester system is little different from the ten-month year on these items.

Category T5 -- Miscellaneous. Table VII presents the results of the items concerned with various miscellaneous areas that do not correspond to any of the four major categories. An examination of Table VII reveals the following:

1. Items 14 and 19 -- Fifty-nine percent of the teachers considered it desirable to teach the same subjects in the second semester as in the first. Sixty-seven percent of the teachers had sufficient time to complete the curriculum requirements in their courses.

2. Items 15 and 16 -- Fifty-seven percent of the teachers found it to be of personal advantage to meet a new group of students in the second semester. Thirty-eight percent of the teachers were able to get to know the students better (Not as Well -- 17%, No Diff. -- 31%).

3. Item 25 -- Forty percent of the teachers found that they were under more of a strain under the semester system while 18% felt less strain and 26% saw no difference compared to the ten-month year.

4. Item 26 -- Eleven percent of the teachers felt that the change from one semester to the next could adversely affect clubs, while 5% felt that they could be positively affected and 26% felt that no differences will result.

TABLE VII

MISCELLANEOUS ITEMS FROM THE TEACHERS' OPINIONNAIRE (CATEGORY T5)

Item No.	Under the Semester System:	Results	%
14	Do you consider teaching the same subjects in the second semester as in the first semester	Desirable	59
		Undesirable	5
		Makes No Difference	27
15	Do you find it a personal advantage to meet a new group of students in the second semester?	Yes	57
		No	12
		Makes No Difference	20
16	You were able to get to know your students	Better	38
		Not as Well	17
		No Different	31
19	Have you had sufficient time to complete the curriculum requirements in your subject area?	Yes	67
		No	19
25	Teaching is most demanding on a teacher's nervous energy. Semestering has resulted in	More of a Strain	40
		Less of a Strain	18
		No Different	26
26	Do you expect that the change from the first to the second semester will probably affect the club or event you sponsor	Advantageously	5
		Disadversely	11
		No Different	33
27	Do you feel that one mid-semester report is sufficient?	Yes	74
		No	20
29	Do you favor semestering?	Yes	77
		No	12

5. Item 27 -- One mid-semester report was deemed to be sufficient by 74% of the teachers.

6. Item 29 -- The semester system was generally favored by 77% of the teachers.

Category S5 -- Miscellaneous. Table VIII presents the results of the items on the student opinionnaire concerned with various miscellaneous areas that do not correspond to any of the other four categories. An examination of Table VIII reveals the following:

1. Items 24, 25, 26 and 27 -- Sixty-three percent of the students deemed it an advantage to meet new teachers in the second semester. Thirty percent of the students felt that they became more familiar with their teachers (Not as Well -- 16%, No Diff. -- 42%) and fellow students (Better -- 34%, Not as Well -- 17%, No Diff. -- 41%). Sixty-eight percent of the students also felt that it was an advantage to meet a new group of students after the semester break.

2. Item 31 -- Sixty-six percent of the students felt that there was sufficient time to complete curricular requirements under the semester system while 18% did not.

3. Item 37 -- Forty percent of the students felt that teachers were under a greater strain under the semester system (Less -- 14%, No Diff. -- 27%).

4. Items 40 and 41 -- Students felt that a mid-semester progress report was sufficient (Yes -- 66%) and necessary (Yes -- 72%).

5. Item 43 -- Eighty-three percent (83%) of the students favored the two semester per year program while 8% did not.

6. Item 39 -- Ten percent of the students felt clubs would be

TABLE VIII

MISCELLANEOUS ITEMS FROM THE STUDENTS' OPINIONNAIRE
(CATEGORY S5)

Item No.	Under the Semester System:	Results	%
24	Do you find it an advantage to meet a new group of students in the second semester?	Yes	68
		No	8
		No Different	13
25	Do you find it an advantage to meet new teachers in the second semester?	Yes	63
		No	12
		No Different	13
26	Were you able to get to know your teacher	Better	30
		Not as Well	16
		No Different	42
27	Were you able to get to know your fellow students	Better	34
		Not as Well	17
		No Different	41
31	Do you feel that there is sufficient time in semestering to complete curricular requirements?	Yes	66
		No	18
32	Do you feel that audio-visual aids were necessary when there were no semestering?	Yes	40
		No	16
33	Do you feel that audio-visual aids are necessary because of semestering?	Yes	32
		No	19
		No Different	21
37	Do you feel that the strain on teachers because of semestering is	Greater	40
		Less	14
		No Different	27
39	Do you feel that changes from one semester to another will afect clubs	Advantageously	8
		Adversely	10
		No Different	42
40	Do you feel that one mid-semester progress report is sufficient?	Yes	66
		No	23

TABLE VIII (continued)

MISCELLANEOUS ITEMS FROM THE

STUDENTS' OPINIONNAIRE
(CATEGORY S5)

Item No.	Under the Semester System:	Results	%
41	Do you feel that mid-semester progress report is necessary?	Yes No	72 17
43	Do you favor the two semester per year program?	Yes No	83 8

adversely affected by the changes from one semester to the other (No Diff. -- 42).

Summary and Discussion of Categories T5 and S5

Seeing new faces and getting to know new people in the second semester appears to be advantageous to both teachers and students. Fifty-seven percent of the teachers saw advantages in meeting new students and 63% of the students agreed that it was advantageous to meet a new group of teachers after the semester break. Thirty-eight percent of the teachers and 30% of the students felt that they became more familiar with one another under the semester system. The problem of covering a full year course in half a year is sometimes seen as a problem in the semester system, but 67% of the teachers and 66% of the students agreed that there was sufficient time in the semester system to complete the curriculum requirements.

The teachers reported that they were under more strain in the semester system (40% agree) which must be evident to 40% of the students who reported likewise. Ten percent of the students felt that the change from one semester to the next could adversely affect clubs (No Diff. -- 42%) while 11% of the teachers agreed (No Diff. -- 26%). The mid-semester progress report was seen as sufficient by 74% of the teachers and 66% of the students, with 72% of the students adding that it was also a necessity.

The last item to be dealt with is very general and the recorded responses reiterate the trend that has been prevalent throughout the reporting of the data. The semester system is favored

by 77% of the teachers and 83% of the students.

Of the eight items in the teachers' part of Category T5, six (75%) were answered positively for the semester system. Of the twelve items in the students' part of this category, ten (83%) were answered positively for the semester system. On the items eliciting a positive or negative response to the semester system an average of 46% (range from 5% to 77%) of the teachers and an average of 46% (range from 8% to 83%) of the students gave positive responses. Negative responses were given by an average of 17% (range from 5% to 40%) of the teachers and an average of 16% (range from 8% to 40%) of the students. The feeling that the situation under the semester system is no different than it was under the ten-month year was expressed by an average of 27% (range from 20% to 33%) of the teachers and 30% (range from 20% to 42%) of the students.

The results of this category lean positively to the semester system and a very high percent of teachers (77%) and students (83%) responded in favor of the semester system on the item that asked the direct question "Do you favor the semester system?".

MEASUREMENT OF OPINION DIFFERENCES

The previous section outlined and compared the opinion trends of the teachers and the students concerning each item of the teachers' and students' opinionnaires. In this section it will be determined, by means of the calculation of the Chi Square statistic, if the differences noted in the opinions of the teachers and students are statistically significant. As detailed in Chapter III, the situations of the

five schools involved are quite different. Strathcona Semester is a special high school designed for older students and adults who wish to complete their high school requirements. It has been operating under various names and in various locations since September 1967, and has utilized the semester system since the school was established. Victoria Composite and Jasper Place Composite are both large high schools and have both been using the semester system since September, 1968. McNally Composite and Queen Elizabeth Composite both were initiated into the semester system in September, 1969. McNally has about eighty percent of its subjects semestered, while Queen Elizabeth is only partially semestered with many teachers being assigned one semestered and one full year class in the same subject. Because of these differences in the high schools involved, it was considered to be meaningful and interesting to see if the perceptions of the teachers and the students concerning the semester system varied significantly from one school to another. Thus the analysis of the data was carried out to answer the following questions:

1. Do the opinions of the teachers from a particular high school vary significantly from the opinions of the teachers of the other four schools?

2. Do the opinions of the students from a particular high school vary significantly from the opinions of the students of the other four schools?

The teachers and the students were asked to respond to several items of similar intent such as, "Are the students receiving more individual attention under the semester system?" The analysis of the

data was carried out to answer this third question:

3. Do the opinions of the teachers and the students from each school individually vary significantly concerning the items of similar intent? In other words, if the teachers report that they are able, for example, to provide the students with more individual help under the semester system, is this opinion also held by the students?

The responses of the teachers across the five schools and the students across the five schools were grouped into the categories described and used in section II of this chapter (i.e. answers to questions 1 and 2 above). In analyzing the responses of teachers and students to items of similar intent, the categories were not used because in many cases the category of the teachers' item was different from the category of the students' item with which it was matched. For example, the teachers' questions dealing with individual attention, favorability of semestering for skill subjects, etc., were categorized under "Teacher Presentation" whereas the students' questions dealing with the same areas had to be categorized under "Impact on the Student". For clarity and brevity the tables presented will contain the items in condensed form, along with the calculated Chi Square and associated probability for each item. Because of the large number of subjects involved (347 Teachers and 5717 Students), and because of the interest in the gross opinion differences of the groups considered, the level of significance accepted in all cases was $p \leq 0.01$.

A. Hypotheses 1 & 2

Questions 1 and 2 above concerning the comparison of the teachers' opinions across the five schools and the comparison of the students' opinions across the five schools will be dealt with by indicating whether the results of each item show acceptance or rejection of the following null hypotheses:

HYPOTHESIS 1: There are no significant differences among the opinions of the teachers across the five schools being tested on each of the items of the opinionnaire.

HYPOTHESIS 2: There are no significant differences among the opinions of the students across the five schools being tested on each of the items of the opinionnaire.

Category T2 -- Teaching Process. Table IX presents the results of the Chi Square analysis of the items on the teacher opinionnaire concerning the teaching process in the classroom. An examination of Table IX reveals the following:

1. Hypothesis 1 was rejected for items 6, 10, 12, 18, and 20. Thus there were significant differences among the opinions of the teachers concerning their marking load, the facilitating of the understanding of subject-matter concepts, the facilitating of creativity, the opportunity for course enrichment, and the need for audio-visual equipment.

Discussion. Significant differences in teachers' opinions were found on five of the ten items concerning the teaching process.

TABLE IX

TEACHERS' RESPONSE PATTERNS ACROSS THE FIVE SCHOOLS ON ITEMS CONCERNING TEACHING PROCESS (CATEGORY T2) (N = 347)

Item No.	Effects of Semestering On:	χ^2	p
5	Lesson preparation time	21.64	.04
6	Marking load	33.26	<.001
9	Individual attention for students	22.12	.04
10	Facilitating understanding of subject-matter concepts	31.98	<.001
11	Facilitating mastery of factual material	24.52	.02
12	Facilitating creativity	29.36	<.001
17	Teaching of a skill subject	27.36	.04
18	Opportunity for course enrichment	28.52	<.001
20	Need for A-V equipment	22.25	<.001
23	Intensity of instruction	18.43	.10

Examination of the complete results in Appendix A reveals that four of the teacher groups agreed consistently on these items, while the opinions of the teachers of Strathcona Semester School were in opposition on four of the five items. On item 6 concerning marking load under the semester system, 29% of the Strathcona teachers detected less marking (Greater -- 14%) while the teachers of the other four schools had more. (Range from 24% to 34%, Mean of 30%). On item 12 concerning the facilitating of creativity 36% of the Strathcona teachers felt that semestering was a hindrance while none (0%) felt that it was an aid. In contrast the teachers of the other four schools felt that semestering was a decided aid in this area. (Range of 29% to 42%, Mean of 34%). On item 18 concerning the opportunity of course enrichment under semestering, 43% of the Strathcona teachers felt that semestering did not supply this opportunity while 21% felt it did. Again in contrast, the teachers of the other four schools felt that semestering did supply the opportunity to enrich a course (Range from 35% to 52%, Mean of 43%). On item 20 concerning the need for more audio-visual equipment because of semestering, a negative response was recorded by 50% of the Strathcona teachers (Yes -- 21%) while a decidedly positive response was recorded by the other teachers (Range from 58% to 66%, Mean of 62%).

There are possible explanations for the opposing views of the Strathcona Semester teachers to the items of this category. The students of this school are older on the average than the students of the other four schools, and are usually taking one or two courses to complete requirements for a high school diploma or matriculation. One

of the main objectives is the passing of the Grade XII Departmental examinations, thus perhaps such areas as the facilitation of creativity, course enrichment, and the use of audio-visual aids have become deemphasized.

2. Hypothesis 1 was accepted for items 5, 9, 11, 17 and 23. Thus there were no significant differences among the opinions of the teachers concerning class preparation time, the opportunity to give individual attention to students, facilitating student mastery of subject-matter material, the teaching of skill subjects, and the intensity of instruction under the semester system.

Category S2 -- Teacher Presentation. Table X presents the results of the Chi Square analysis of the items on the student opinionnaire concerning teacher presentation in the classroom. An examination of Table X reveals the following results:

Hypothesis 2 was rejected for all of the items in this category, namely items 19, 20, 30, and 35. Thus there were significant differences among the opinions of the students concerning the individual attention received in academic and technical subjects, course enrichment and the intensity of instruction under the semester system. Strathcona Semester students responded most positively (44%) to the semester system concerning the individual attention given by teachers in academic subjects. On the average, 25% of the students of the other four schools responded positively, and an average of 19% felt there was less individual attention given. Perhaps the smaller classes at Strathcona Semester allowed for more individual attention for students. Concerning course enrichment, 58% of the Jasper Place

TABLE X

STUDENTS' RESPONSE PATTERNS ACROSS THE FIVE SCHOOLS ON ITEMS CONCERNING TEACHING PROCESS (CATEGORY S2) (N = 5717)

Item No.	Effects of Semestering On:	χ^2	p
19	Individual attention received in academic subjects	96.51	$<.001$
20	Individual attention received in technical subjects	210.29	$<.001$
30	Enrichment and fullness of courses	215.77	$<.001$
35	Intensity of instruction	81.45	$<.001$

students and 52% of the Victoria students felt that semestering was advantageous. However, only 42% of Strathcona Semester, 38% of McNally and 36% of Queen Elizabeth students agreed. The response of the Strathcona Semester students may be related to the negative response of their teachers to this item, while the lower responses of the McNally and Queen Elizabeth students perhaps is related to the fact that while their teachers feel that more enrichment is resulting under semestering, they are not able to offer as full a course as possible in their first experience with semestering. More intensive instruction resulted under the semester system according to 70% of the Strathcona Semester students while only 44% of the Queen Elizabeth group agreed. (Vic. -- 51%, J. P. -- 57%, McN. -- 57%). Perhaps the push for the final examination has resulted in this response from the Strathcona Semester group, while the lower response of the Queen Elizabeth students could possibly be due to the fact that only about half of the courses were semestered at Queen Elizabeth resulting in less overall change.

Category T3 -- Impact on the Student. Table XI presents the results of the Chi Square analysis of the items on the teacher opinionnaire concerning the impact of the semester system on the student. An examination of Table XI reveals the following results:

1. Hypothesis 1 was rejected for items 7, 8, 21, 22, and 28. Thus there were significant differences among the opinions of teachers concerning the effort put forth by students in class and in homework, student attendance, student achievement, and the dropout problem under the semester system.

Discussion. Significant differences among teachers' opinions

TABLE XI

TEACHERS' RESPONSE PATTERNS ACROSS THE FIVE SCHOOLS ON ITEMS CONCERNING IMPACT ON STUDENT (CATEGORY T3) (N = 347)

Item No.	Effects of Semestering On:	χ^2	p
7	Effort of students in class	33.26	$<.001$
8	Effort of students on homework	44.09	$<.001$
13	Educational growth of student	16.87	.15
21	Class attendance of students	31.84	$<.001$
22	Student achievement	35.20	$<.001$
24	Study habits because of more immediate goals	21.89	.04
28	Problem of dropping behind when classes missed	19.34	.01

were found on five of the seven items in this category. An examination of the complete results in Appendix A reveals teachers' opinions varied widely on these items. On item 8 concerning students' effort on homework, the McNally teachers were the only group to express the feeling that more effort was resulting under semestering (32%). The teachers of the other four schools felt that less effort was prevalent (Range of 16% to 29%, Mean of 21%). On item 21 concerning student attendance, Strathcona (21%) and Victoria (30%) felt that semestering had negatively affected attendance, while the other three groups had seen a positive effect in this area (Range of 18% to 41%, Mean of 28%).

While the differences recorded concerning effort in homework could be real ones, the results may have been affected by differences in teachers' interpretation of the question. In many subjects the students are given time to work on their homework assignments during the latter part of the eighty-minute period, therefore while their overall effort on their assignments may not have changed, the amount of effort in work done at home would be less. The increased individual attention voiced by most students and teachers would be due probably at least in part to the help that teachers were able to give students in class with homework assignments. The effect on students' attendance is complicated by the fact that by missing one class, a student has missed twice as much time as under the ten-month year.

2. Hypothesis 1 was accepted for items 13 and 24. Thus there were no significant differences among the opinions of teachers concerning students' educational growth, and students' study habits.

Category S3 -- Impact on the Student. Table XII presents the results of the Chi Square analysis of the items on the student opinionnaire concerning the impact of the semester system on the student. An examination of Table XII reveals that Hypothesis 2 was rejected for all of the items in this category. Thus there were significant differences among the opinions of students on all of the items contained in Table XII.

A wide variety of differences is evident from an examination of the results of these items. On item 13 concerning examination preparation, the Strathcona Semester students felt that a greater amount of time was needed (Greater -- 27%, Less -- 16%) while an average of 24% (Range from 21% to 27%) of the students from the other four schools thought less time was needed for examination preparation under the semester system. Again, the fact that all of the Strathcona Semester students had to prepare for Grade XII Departmentals would perhaps have a bearing on this result. A greater overall work load (Item 14) was reportedly experienced by 44% of Strathcona Semester students (Less - 13%), 27% of Queen Elizabeth students (Less -- 25%) and 35% of the McNally students (Less -- 27%), while less work was reportedly experienced by 39% of the Jasper Place (More -- 13%) and 30% of the Victoria (More -- 20%) students. While the percentages varied significantly from school to school, the students generally felt that they had put forth more effort in class (Range from 40% to 66%), more effort in homework (Range from 37% to 63%), had experienced more homework in academic subjects (Range from 31% to 52%), had found concept comprehension easier (Range from 22% to 43%), learning a skill

TABLE XII

STUDENTS' RESPONSE PATTERNS ACROSS THE FIVE SCHOOLS ON ITEMS CONCERNING IMPACT ON STUDENT (CATEGORY S3) (N = 5717)

Item No.	Effects of Semestering On:	χ^2	p
13	Time needed for examination preparation	57.83	$<.001$
14	Your work load	308.76	$<.001$
15	Effort you put forth in class	153.82	$<.001$
16	Effort you put forth in homework	105.31	$<.001$
17	Amount of homework in academic subjects	130.34	$<.001$
18	Amount of homework in technical subjects	142.91	$<.001$
21	Concept comprehension	104.25	$<.001$
22	Learning of factual material	82.70	$<.001$
23	Your educational growth	107.12	$<.001$
24	Meeting new students after semester break	441.69	$<.001$
28	Learning a skill subject	162.25	$<.001$
29	Learning situation in academic subjects	151.25	$<.001$
34	Students' attendance in classes	91.40	$<.001$
36	Study habits	142.28	$<.001$
38	Strain on students	238.71	$<.001$
42	Problem of dropping behind when classes missed	101.37	$<.001$

subject easier (Range from 14% to 28%), and the general learning situation in academic subjects to be superior (Range from 27% to 60%) under the semester system than under the ten-month year. The students felt it was an advantage to meet a new group of students in the second semester (Range from 34% to 79%), felt it was an advantage to meet a new group of teachers in the second semester (Range from 36% to 71%), considered their attendance to be more necessary (Range from 60% to 84%), felt more of a strain (Range from 36% to 59%), and felt that the problem of wanting to drop a subject when classes were missed was accentuated (Range from 48% to 57%) under the semester system. On two items the opinions of the Queen Elizabeth students were in opposition to the overall opinions of the other four schools. On item 22 concerning the learning of factual material, 26% of the Queen Elizabeth students considered it harder, while 25% considered it easier under the semester system. An average of 35% of the students of the other four schools found the situation easier and an average of 20% found it harder. On item 36 concerning study habits, 23% of the Queen Elizabeth students considered them to be worsened while 22% considered them to be better under the semester system. An average of 37% of the students of the other four schools considered study habits to be better while an average of 16% considered them to be worsened under the semester system.

The trend of the results of this category is one of general positive feelings towards the semester system, however the students of Strathcona Semester felt most strongly that more work and pressure resulted, while the students of Queen Elizabeth were consistently the

least positive about the semester system. The pressures concerned with preparing for Grade XII Departmentals quite conceivably have affected the opinions of the Strathcona Semester group, while the problems associated with trying to semester only a few subjects possibly resulted in the less favorable impression expressed by the Queen Elizabeth group. On the other hand, while taking some subjects for the whole year and others for only a semester, the Queen Elizabeth students may have been in a more favorable position to appraise the semester and ten-month plan.

Category T4 -- The Eighty-Minute Period. Table XIII presents the results of the Chi Square analysis of the items on the teacher opinionnaire concerned with the effects of the eighty-minute period. An examination of Table XIII reveals the following results:

1. Hypothesis 1 was rejected for items 30, 31, 32, 33, 35, 38, and 42 to 52. Thus there were significant differences among the opinions of teachers concerning the appropriateness of the length of the eighty-minute period for all concerned, marking load, the maintenance of discipline, the use of outside resources, flexibility in class presentation, getting to know the students, the teaching of skill subjects, the need for A-V equipment, the use of discussion groups, student achievement, intensity of instruction, strain on teachers, attendance of students and inappropriate student behavior because of the eighty-minute period.

Discussion. Significant differences among teachers' opinions were found on seventeen of the twenty-four items in this category. An examination of the complete results in Appendix A reveals that on items

TABLE XIII

TEACHERS' RESPONSE PATTERNS ACROSS THE FIVE SCHOOLS ON ITEMS CONCERNING THE EIGHTY-MINUTE PERIOD (CATEGORY T4) (N = 347)

Item No.	The Eighty-Minute Period:	χ^2	p
30	Appropriateness of its length for teachers	41.34	$<.001$
31	Appropriateness of its length for above-average student	29.26	$<.001$
32	Appropriateness of its length for average student	32.54	$<.001$
33	Appropriateness of its length for below-average student	30.39	$<.001$
34	Amount of lesson preparation time	22.84	.03
35	Marking load	27.84	.01
36	Effort of students in class	23.75	.02
37	Effort of students on homework	23.30	.03
38	Maintenance of discipline	30.32	$<.001$
39	Individual attention for students	13.91	.31
40	Use of A-V equipment	20.28	.06
41	Use of library facilities	21.33	.05
42	Use of outside resources	38.26	$<.001$
43	Flexibility in class presentation	25.98	.01
44	Getting to know your students	32.89	$<.001$
45	Teaching a skill subject	35.52	$<.001$
46	Need for A-V equipment	24.09	$<.001$

TABLE XIII (continued)

TEACHERS' RESPONSE PATTERNS ACROSS THE FIVE SCHOOLS ON ITEMS CONCERNING THE EIGHTY-MINUTE PERIOD

(CATEGORY T4) (N = 347)

Item No.	The Eighty-Minute Period:	χ^2	p
47	Use of discussion groups, committees, etc.	32.17	$<.001$
48	Achievement of students	32.02	$<.001$
49	Intensity of instruction	27.07	.01
50	Strain on the teacher	31.10	$<.001$
51	Attendance of students in classes	38.39	$<.001$
52	Inappropriate behavior of students	20.05	.01
53	Problem of dropping behind when classes missed	7.35	.50

30 to 33, the Queen Elizabeth teachers favored the eighty-minute period much less than the teachers of the other four schools. On these four items, the favorable responses of the Queen Elizabeth teachers ranged from 9% to 58% (Mean of 39%), while the range for the other four groups averaged from 24% to 76% (Mean of 61%). Marking load (Item 35) was reported to be greater by 14% of the Strathcona teachers while a higher percentage of the other four groups detected this marking increase (Range from 24% to 44%, Mean of 33%). The McNally teachers found maintaining discipline easier (22%) in the eighty-minute period as did the teachers of Strathcona (14%) and Jasper Place (11%), while the teachers at Victoria (14%) and Queen Elizabeth (20%) found the situation more difficult in the eighty-minute period. Only 7% of the Strathcona teachers were able to make more use of outside resources because of the eighty-minute period, while an average of 29% (range from 21% to 42%) of the teachers of the other four schools were able to do so (Item 42). The eighty-minute period was superior for teaching skill subjects (Item 45) in the opinion of only 10% of the Queen Elizabeth teachers, while an average of 40% (range from 29% to 50%) of the other four teachers' groups agreed. Only 13% of the Queen Elizabeth teachers saw an improvement in pupil achievement (Item 48) because of the eighty-minute periods, while an average of 36% (range from 27% to 41%) of the teachers from the other four schools agreed. The eighty-minute period had affected the attendance of students (Item 52) positively in the opinion of 19% of the Jasper Place and 41% of the McNally teachers, and negatively in the opinion of 21% of the Strathcona teachers, 29% of the Victoria teachers and

16% of the Queen Elizabeth teachers.

While the overall reactions to the eighty-minute period were positive, the reactions of the Strathcona Semester and Queen Elizabeth teachers tended to be less positive than those of the other three groups. The less positive opinions of the Queen Elizabeth group concerning the eighty-minute period may have been due to the problems experienced, or perhaps by experiencing the eighty-minute and forty-minute periods together, they were able to make a more realistic assessment of the eighty-minute period.

2. Hypothesis 1 was accepted for items 34, 36, 37, 39, 40, 41, and 53. Thus there were no significant differences among the opinions of teachers concerning lesson preparation time, marking load, effort put forth by students, individual attention given to students, the use of A-V equipment and library facilities, flexibility in classroom presentation, the intensity of instruction, inappropriate student behavior, and the problem of missing classes and wishing to drop out because of the eighty-minute period.

Category S4 -- The Eighty-Minute Period. Table XIV presents the results of the Chi Square analysis of the items on the student opinionnaire concerning the effects of the eighty-minute period. An examination of Table XIV reveals that Hypothesis 2 was rejected for all of the items (44 to 58) on Table XIV. Thus there were significant differences among the opinions of students on all of the items contained in Table XIV.

In most of the items concerning the students' opinions of the eighty-minute period, general agreement was recorded by students,

TABLE XIV

STUDENTS' RESPONSE PATTERNS ACROSS THE FIVE SCHOOLS ON ITEMS CONCERNING THE EIGHTY-MINUTE PERIOD (CATEGORY S4) (N = 5717)

Item No.	The Eighty-Minute Period:	χ^2	p
44	Appropriateness of its length for above-average student	114.14	$<.001$
45	Appropriateness of its length for average student	106.24	$<.001$
46	Appropriateness of its length for below-average student	46.93	$<.001$
47	Opportunity to work at your own speed	35.66	$<.001$
48	Amount of work	96.79	$<.001$
49	Attention in class	212.12	$<.001$
50	For unassigned periods	99.10	$<.001$
51	Behavior in class	162.34	$<.001$
52	Homework load	128.37	$<.001$
53	Use of library facilities	362.92	$<.001$
54	Use of outside resources	163.98	$<.001$
55	Use of discussion groups, committees, etc.	114.62	$<.001$
56	Achievement of grades	85.65	$<.001$
57	Affect on student attendance	36.24	$<.001$
58	Inappropriate behavior by students	43.68	$<.001$

however conflicts of opinions were evident on a few items. The eighty-minute period was seen to be of satisfactory length for the above average student (Range from 49% to 65%), and the average student (Range from 50% to 76%), but was seen as too long for the below average student (Range from 40% to 49%). The eighty-minute period tended to allow the students to work more at their own speed (Range from 49% to 65%), tended to result in a greater work load (Range from 43% to 68%), reportedly was better for unassigned periods (Range from 24% to 51%), tended to allow library facilities (Range from 18% to 63%), outside resources (Range from 48% to 83%), and student oriented activities such as discussion groups (Range from 62% to 74%) to be used more. Students achievement was reported to be positively affected (Range from 28% to 45%), as was their attendance (Range from 30% to 36%). The use of the eighty-minute period was not seen to be resulting in inappropriate behavior such as absenteeism and vandalism (Range from 28% to 46%). Mixed reactions were recorded concerning students' attention to the teacher in the eighty-minute period (Item 49). Thirty-five percent of the Strathcona Semester students felt that their attention was greater (Less -- 22%), while an average of 36% (Range from 32% to 48%) of the students of the other four schools felt their attention was less. Behavior in the eighty-minute period was seen as better (Item 51) by 38% of the Strathcona Semester and 21% of the Jasper Place students, while an average of 28% (Range from 22% to 32%) of the students from the other three schools felt behavior was worse. Homework load was seen as less by 31% (More -- 26%) of the Jasper Place students while an average of 35% (Less averaged 22%) felt that there tended to be less work because of the eighty-minute period.

While the results of this category do not show any one school

as being consistently high or low, the students of Strathcona Semester emphasized that their work was intense and of greater volume with small increases in the use of library facilities and outside resources resulting because of the use of eighty-minute periods. Their greater average age and maturity is perhaps reflected in their positive and opposing responses to the items concerning behavior in class and attention in class. The Queen Elizabeth students were the least positive of the five schools on six of the fifteen items of this category, again perhaps reflecting either their relative displeasure with, or more realistic assessment of the eighty-minute period as explained in the previously dealt with student category.

Category T5 -- Miscellaneous. Table XV presents the results of the Chi Square analysis of the miscellaneous items from the teacher opinionnaire. An examination of Table XV reveals the following results:

1. Hypothesis 1 was rejected for items 14, 15, 26, 27, and 29. Thus there were significant differences among the opinions of teachers concerning teaching the same subjects in the second semester, meeting new students in the second semester, the continuity of clubs in the second semester, the need for a mid-semester report, and whether or not they favored the semester system.

Discussion. Significant differences in teachers' opinions were found in five of the eight items in this category. An examination of the complete results in Appendix A reveals that many small differences are present but in most cases no school or schools can be seen as clearly causing the differences. However in item 29, only 49% of the Queen Elizabeth teachers favored the semester system while an average

TABLE XV

TEACHERS' RESPONSE PATTERNS ACROSS THE FIVE SCHOOLS ON MISCELLANEOUS ITEMS (CATEGORY T5) (N = 347)

Item No.	Effects of Semestering On:	χ^2	p
14	Desirability of teaching same subjects in second semester	31.14	$<.001$
15	Desirability of meeting new students in second semester	27.38	.01
16	Getting to know your students	23.30	.03
19	Completing curriculum requirements	13.06	.11
25	Strain on the teacher	24.10	.02
26	Continuity of clubs in second semester	39.66	$<.001$
27	Need for mid-semester report	19.60	.01
29	Favorability of semestering	42.61	$<.001$

of 81% of the other four teachers' groups favored semestering (range from 71% to 91%). This reserved acceptance of the semester system by the Queen Elizabeth teachers has been evident throughout the analysis of the results. As previously mentioned, Queen Elizabeth was experimenting with the semester system for the first year and only in some subjects. The teachers overall work load perhaps was increased and many other administrative problems arose, which perhaps resulted in this minimal acceptance of the semester system. However, perhaps by offering the same course on a whole year and on a semester basis, the Queen Elizabeth teachers were able to compare and assess the semester and ten-month plans more realistically.

2. Hypothesis 1 was accepted for items 16, 19, and 25. Thus there were no significant differences among the opinions of teachers concerning getting to know the students, completion of curriculum requirements, and the strain on teachers.

Category S5 -- Miscellaneous. Table XVI presents the results of the Chi Square analysis of the miscellaneous items from the student opinionnaire. An examination of Table XVI reveals that Hypothesis 2 was rejected for all of the items in this category. Thus there were significant differences among the opinions of students concerning items 25, 26, 27, 31, 32, 33, 37, 39, 40, 41, and 43 on Table XVI.

Students felt that it was advantageous to meet new teachers in the second semester (Range from 36% to 71%), and that it tended to be easier to get to know fellow students (Range from 26% to 38%) under the semester system. Sufficient time was provided in a semester to complete curriculum requirements (Range from 55% to 79%). It is

TABLE XVI

STUDENTS' RESPONSE PATTERNS ACROSS THE FIVE SCHOOLS ON MISCELLANEOUS ITEMS (CATEGORY S5) (N = 5717)

Item No.	Effects of Semestering On:	χ^2	p
25	Desirability of meeting new teachers in second semester	307.94	$<.001$
26	Getting to know teachers	78.81	$<.001$
27	Getting to know fellow students	150.18	$<.001$
31	Completion of curriculum requirements	180.41	$<.001$
32	Necessity of A-V aids under 10-month year	82.66	$<.001$
33	Necessity of A-V aids because of semestering	103.07	$<.001$
37	Strain on teachers	105.98	$<.001$
39	Continuity of clubs in second semester	152.47	$<.001$
40	Sufficiency of one mid-semester report	79.11	$<.001$
41	Necessity of mid-semester report	70.39	$<.001$
43	Favorability of semestering	224.66	$<.001$

interesting to note here that the lowest positive responses concerning curriculum completion were recorded by the two schools experiencing the semester system for the first time. In the other three schools, where the teachers had had more experience with semestering, the percentages were much higher. Item 43 concerned whether the students favored the semester system. The assented votes ranged from 71% of the Queen Elizabeth students to 91% of the Strathcona Semester students. As was the case in the similar teachers' item, the Queen Elizabeth group recorded the lowest percentage. However, the Queen Elizabeth students' 71% approval was considerably higher than their teachers' 49% approval.

Discussion of Students' Results. Hypothesis 2 was rejected for every student item in this section. Significant differences among students' opinions were recorded for all items. A study of the complete results in Appendix A reveals that there is generally an agreement in the opinion trends of the students, a fact that was also noted in the first section of this chapter. However, the fact that significant differences do appear is due more to the large student sample size (N = 5717) than to general disagreement. The calculation of the expected frequencies used in the Chi Square analysis involves multiplying the column total by the row total and dividing by N, resulting in the case of the students in large expected frequencies. Very small discrepancies in any cell can cause significant differences to show up, that are possibly less meaningful when a large N is involved.

B. Hypothesis 3

Question 3 above concerning the comparison of the opinions of

the students and teachers (of each school individually) on items of similar intent will be dealt with by indicating whether the results of each item show acceptance or rejection of the following null hypothesis:

Hypothesis 3: There are no significant differences between the opinions of the teachers and the opinions of the students in the five schools individually on the items of similar intent on the teacher and student opinionnaires.

For clarity and brevity on Table XVII the numbers of both the teachers' and students' items are recorded, the intent of the item is summarized and the Chi Square and associated probability level for each item for each of the five schools is listed. An examination of Table XVII reveals the following results which have been summarized and recorded in Table XVIII.

Discussion. In only the few cases outlined in section II of this chapter were the opinions of teachers in opposition to students' opinions concerning a particular item. Thus, even though the teachers and the students generally agreed concerning most items, the results of this section indicate that there were significant differences between the percentages of teachers and students that shared these coinciding opinions. An examination of Table XVIII reveals the following results:

1. Strathcona Semester School. An examination of Table XVIII reveals that there were no significant differences between the opinions

TABLE XVII

STUDENTS' RESPONSES VERSUS TEACHERS' RESPONSES BY SCHOOLS TO ITEMS OF SIMILAR INTENT

		Scona		Vic		J. P.		Q. E.		McN	
Item No. (Tchr.-St.)	Affects of Semestering On:	χ^2	p	χ^2	p	χ^2	p	χ^2	p	χ^2	p
7-15	Students effort in class	11.20	.01	37.37	$<.001$	36.38	$<.001$	24.24	$<.001$	23.94	$<.001$
8-16	Students effort in homework	29.91	$<.001$	26.93	$<.001$	55.93	$<.001$	52.48	$<.001$	43.32	$<.001$
9-19	Individual attention to students	3.53	.32	13.99	$<.001$	31.13	$<.001$	23.15	$<.001$	29.11	$<.001$
10-21	Facilitating subject-matter concepts	1.49	.69	16.92	$<.001$	22.63	$<.001$	4.64	.20	26.55	$<.001$
11-22	Mastery of factual material	5.56	.14	1.76	.62	16.20	$<.001$	18.32	$<.001$	26.95	$<.001$
13-23	Limitation of students' educational growth	8.60	.04	32.42	$<.001$	43.97	$<.001$	20.79	$<.001$	32.53	$<.001$
15-25	Meeting new students and teachers in 2nd semester	5.10	.16	19.96	$<.001$	9.36	.02	11.08	.01	3.02	.39

TABLE XVII (continued)

STUDENTS' RESPONSES VERSUS TEACHERS' RESPONSES

BY SCHOOLS TO ITEMS OF SIMILAR INTENT

Item No. (Tchr.-St.)	Affects of Semestering On:	Scona		Vic		J. P.		Q. E.		McN	
		χ^2	p	χ^2	p	χ^2	p	χ^2	p	χ^2	p
16-26	Getting to know students and teachers	0.40	.94	3.07	.38	5.34	.15	14.84	$<.001$	20.66	$<.001$
17-28	Skill subjects	14.70	.01	26.53	$<.001$	20.23	$<.001$	13.64	.01	19.32	$<.001$
18-30	Course enrichment	5.59	.13	6.75	.08	4.69	.20	6.07	.11	9.71	.02
19-31	Completion of curriculum	4.28	.12	7.03	.03	13.90	$<.001$	21.93	$<.001$	8.06	.02
21-34	Attendance of students	56.01	$<.001$	52.26	$<.001$	140.91	$<.001$	99.20	$<.001$	45.25	$<.001$
22-56	Student achievement	2.66	.45	10.80	.01	34.23	$<.001$	24.91	$<.001$	29.78	$<.001$
23-35	Intensity of instruction	6.91	.07	0.67	.88	13.51	$<.001$	22.53	$<.001$	7.44	.06
24-36	Students' study habits	4.98	.17	6.16	.10	66.57	$<.001$	49.31	$<.001$	50.27	$<.001$

TABLE XVII (continued)

STUDENTS' RESPONSES VERSUS TEACHERS' RESPONSES

BY SCHOOLS TO ITEMS OF SIMILAR INTENT

Item No. (Tchr.-St.)	Affects of Semestering On:	Scona		Vic		J. P.		Q. E.		McN	
		χ^2	p	χ^2	p	χ^2	p	χ^2	p	χ^2	p
25-37	Strain on teachers	10.01	.02	7.79	.05	5.11	.16	2.87	.41	5.16	.16
26-39	Continuity of clubs	28.98	$<.001$	50.04	$<.001$	36.91	$<.001$	28.03	$<.001$	29.41	$<.001$
27-40	Sufficiency of mid-semester report	0.97	.62	7.27	.03	0.85	.65	0.31	.86	3.46	.18
28-42	Dropping classes after poor attendance	0.145	.93	23.30	$<.001$	10.49	.01	1.46	.49	0.51	.77
29-43	Favor semestering?	9.11	.01	14.04	$<.001$	8.69	.01	19.35	$<.001$	2.42	.30
31-44	Appropriateness of 80 minute period for above-average student	0.64	.89	20.17	$<.001$	13.99	$<.001$	13.60	$<.001$	20.44	$<.001$
32-45	Appropriateness of 80 minute period for average student	0.73	.87	8.24	.04	8.10	.04	19.48	$<.001$	17.68	$<.001$

TABLE XVII (continued)

STUDENTS' RESPONSES VERSUS TEACHERS' RESPONSES

BY SCHOOLS TO ITEMS OF SIMILAR INTENT

		Scona		Vic		J. P.		Q. E.		McN	
Item No. (Tchr.-St.)	Affects of Semestering On:	χ^2	p	χ^2	p	χ^2	p	χ^2	p	χ^2	p
33-46	Appropriateness of 80 minute period for below-average student	3.07	.38	26.74	$<.001$	23.70	$<.001$	9.42	.02	8.88	.03
37-16	Students' effort in homework in 80 minute periods	22.72	$<.001$	29.75	$<.001$	77.47	$<.001$	26.10	$<.001$	44.23	$<.001$
38-51	Discipline in 80 minute periods	3.67	.30	17.38	$<.001$	41.44	$<.001$	10.23	.02	19.20	$<.001$
41-53	Use of library in 80 minute periods	7.53	.06	78.36	$<.001$	111.75	$<.001$	17.74	$<.001$	39.59	$<.001$
47-55	Use of discussion groups, committees, etc. in 80 minute periods	11.23	.01	12.64	.01	19.43	$<.001$	39.17	$<.001$	10.67	.01
48-56	Students achievement because of 80 minute periods	5.78	.12	4.87	.18	53.32	$<.001$	31.16	$<.001$	44.14	$<.001$

TABLE XVII (continued)

STUDENTS' RESPONSES VERSUS TEACHERS' RESPONSES

BY SCHOOLS TO ITEMS OF SIMILAR INTENT

		Scona		Vic		J. P.		Q. E.		McN	
Item No. (Tchr.-St.)	Affects of Semestering On:	χ^2	p	χ^2	p	χ^2	p	χ^2	p	χ^2	p
51-57	Students attendance because of 80 minute periods	5.19	.16	12.41	.01	35.72	$<.001$	24.92	$<.001$	31.02	$<.001$
52-58	Dropping courses after poor attendance in 80 minute periods	1.81	.40	8.37	.02	28.78	$<.001$	2.53	.28	13.23	$<.001$

TABLE XVIII

SUMMARY OF RESULTS: A SCHOOL BY SCHOOL COMPARISON OF STUDENTS' AND TEACHERS' OPINIONS ON ITEMS OF SIMILAR INTENT

Item No. (Tchr.-St.)	Effects of Semestering On:	Hypothesis 3 Accepted I.E. No Significant Differences Between Teachers' and Students' Opinions At:	Hypothesis 3 Rejected I.E. Significant Differences Between Teachers' and Students' Opinions At:
		$(p \leq 0.01)$	
7-15	Students' effort in class	None	All 5
8-16	Students' effort in homework	None	All 5
9-19	Individual attention to students	Scona	Vic, JP, QE, McN
10-21	Facilitating subject-matter concepts	Scona, QE	Vic, JP, McN
11-22	Mastery of factual material	Scona, Vic	JP, QE, McN
13-23	Limitation of students' educational growth	Scona	Vic, JP, QE, McN
15-25	Meeting new students and teachers in second semester	Scona, JP, McN	Vic, QE
16-26	Getting to know students and teachers	Scona, Vic, JP	QE, McN
17-28	Skill subjects	None	All 5

TABLE XVIII (continued)

SUMMARY OF RESULTS: A SCHOOL

BY SCHOOL COMPARISON OF STUDENTS' AND

TEACHERS' OPINIONS ON ITEMS OF SIMILAR INTENT

Item No. (Tchr.-St.)	Effects of Semestering On:	Hypothesis 3 Accepted I.E. No Significant Differences Between Teachers' and Students' Opinions At:	Hypothesis 3 Rejected I.E. Significant Differences Between Teachers' and Students' Opinions At:
		($p \leq 0.01$)	
18-30	Course enrichment	All 5	None
19-31	Completion of curriculum	Scona, Vic, McN	JP, QE
21-34	Attendance of students	None	All 5
22-56	Student achievement	Scona	Vic, JP, QE, McN
23-35	Intensity of instruction	Scona, Vic, McN	JP, QE
24-36	Students' study habits	Scona	Vic, JP, QE, McN
25-37	Strain on teachers	All 5	None
26-39	Continuity of clubs	None	All 5
27-40	Sufficiency of mid-semester report	All 5	None
28-42	Dropping classes after poor attendance	Scona, QE, McN	Vic, JP

TABLE XVIII (continued)

SUMMARY OF RESULTS: A SCHOOL

BY SCHOOL COMPARISON OF STUDENTS' AND

TEACHERS' OPINIONS ON ITEMS OF SIMILAR INTENT

Item No. (Tchr.-St.)	Effects of Semestering On:	Hypothesis 3 Accepted I.E. No Significant Differences Between Teachers' and Students' Opinions at:	Hypothesis 3 Rejected I.E. Significant Differences Between Teachers' and Students' Opinions at:
		(p ≤ 0.01)	
29-43	Favor semestering?	McN	Scona, Vic, JP, QE
	80 MINUTE PERIOD		
31-44	Appropriateness for above-average student	Scona	Vic, JP, QE, McN
32-45	Appropriateness for average student	Scona, Vic, JP	QE, McN
33-46	Appropriateness for below-average student	Scona, QE, McN	Vic, JP
37-16	Students' effort in homework	None	All 5
38-51	Discipline in class	Scona, QE	Vic, JP, McN
41-53	Use of library	Scona	Vic, JP, QE, McN
47-55	Use of discussion groups, committees, etc.	None	All 5

TABLE XVIII (continued)

SUMMARY OF RESULTS: A SCHOOL BY SCHOOL COMPARISON OF STUDENTS' AND TEACHERS' OPINIONS ON ITEMS OF SIMILAR INTENT

Item No. (Tchr.-St.)	Effects of Semestering On:	Hypothesis 3 Accepted I.E. No Significant Differences Between Teachers' and Students' Opinions At:	Hypothesis 3 Rejected I.E. Significant Differences Between Teachers' and Students' Opinions At:
		$(p \leq 0.01)$	
48-56	Student achievement	Scona, Vic	JP, QE, McN
51-57	Student attendance	Scona	JP, Vic, QE, McN
52-58	Dropping courses after poor attendance	Scona, Vic	JP, QE, McN

of teachers and students (Hypothesis 3 accepted) on 22 of the 30 items dealt with.

Hypothesis 3 was accepted for the following items which are recorded on Table XVIII: 9-19, 10-21, 11-22, 13-23, 15-25, 16-26, 18-30, 19-31, 22-56, 23-35, 24-36, 25-37, 27-40, 28-42, 31-44, 32-45, 33-46, 38-51, 41-53, 48-56, 51-57, 52-58.

Hypothesis 3 was rejected for the following items: 7-15, 8-16, 17-28, 21-34, 26-39, 29-43, 37-16, 47-55.

Because of the relatively small sample size at Strathcona Semester (14 teachers and 253 students) the calculation of the Chi Squares would be affected least by the sample size problem mentioned previously. The opinions of the teachers and students of this group show much more consistent agreement than those of teachers and students at any of the other four schools. The students of Strathcona Semester are older and more mature on the average than normal high school students, (in fact many are adults of thirty and forty years of age) and they are enrolled in only Grade XII Departmental subjects. Thus they are a group that shares more common ground with their teachers and specifically a common goal of success in the final examination, which perhaps has a bearing on the agreement shown. On the eight items showing significant opinion differences students' and teachers' opinions conflicted concerning overall effort in homework, attendance, and homework effort in the eighty-minute period. In each case the teachers reported that semestering tended to have an adverse affect in these areas while the students felt that semestering had caused improvement.

2. Victoria Composite. An examination of Table XVIII reveals that there were no significant differences between the opinions of teachers and students (Hypothesis 3 accepted) for 10 of the 30 items in this section.

Hypothesis 3 was accepted for the following items which are recorded on Table XVIII: 11-22, 16-26, 18-30, 19-31, 23-35, 25-37, 27-40, 32-45, 48-56, 52-58.

Hypothesis 3 was rejected for the following items: 7-15, 8-16, 9-19, 10-21, 13-23, 15-25, 17-28, 21-34, 22-56, 24-36, 26-39, 28-42, 29-43, 31-44, 33-46, 37-16, 38-51, 41-53, 47-55, 51-57.

On the surface the teachers and students of Victoria Composite would appear to be much less in agreement with each other than were the Strathcona group. However, due to the larger population involved at Victoria Composite (77 teachers and 1618 students) and the nature of the Chi Square explained earlier, smaller discrepancies between the opinions of Victoria Composite teachers and students would tend to result in larger Chi Squares and thus more significant differences. However, an examination of the complete results in Appendix B reveals that of the 20 items on which significant differences were recorded, the general opinion of the two groups coincided on all but four of the items. Direct opposition in their opinions occurred concerning overall effort in homework, the effect of semestering on clubs, effort in homework because of the eighty-minute period, and the effect of the eighty-minute period on students' attendance. Thus while it would appear that the students and teachers of Victoria Composite disagreed on a majority of the items, they in fact generally agreed on 26 of the

30 items, with the significant difference showing up mainly because of differences in the degree of agreement.

3. Jasper Place Composite. An examination of Table XVIII reveals that there were no significant differences between the opinions of teachers and students (Hypothesis 3 accepted) for six of the thirty items in this section.

Hypothesis 3 was accepted for the following items which are recorded in Table XVIII: 15-25, 16-26, 18-30, 25-37, 27-40, 32-45.

Hypothesis 3 was rejected for the following items: 7-15, 8-16, 9-19, 10-21, 11-22, 13-23, 17-28, 19-31, 21-34, 22-56, 23-35, 24-36, 26-39, 28-42, 29-43, 31-44, 33-46, 37-16, 38-51, 41-53, 47-55, 48-56, 51-57, 52-58.

The same problems were present, due to the large sample size in Jasper Place Composite (123 teachers and 1471 students), that were present and discussed in the Victoria Composite section concerning the nature of the Chi Square. An examination of the complete results in Appendix B reveals that the general opinion of the Jasper Place teachers and students coincided on all but two of the twenty-four items on which significant differences were recorded. Direct opposition occurred in their opinions concerning overall student effort in homework and the effect of the eighty-minute period on homework effort. The students felt that in both cases they were exerting more effort in homework while the teachers felt that less effort was resulting. Thus while it would appear that the students and teachers of Jasper Place Composite disagreed on a majority of the items, they in fact generally agreed on twenty-eight of the thirty items, with the significant

differences showing up mainly because of differences in the degree of agreement.

4. Queen Elizabeth Composite. An examination of Table XVIII reveals that there were no significant differences between the opinions of teachers and students (Hypothesis 3 accepted) on seven of the thirty items in this section.

Hypothesis 3 was accepted for the following items which are recorded in Table XVIII: 10-21, 18-30, 25-37, 27-40, 28-42, 33-46, 38-51.

Hypothesis 3 was rejected for the following items: 7-15, 8-16, 9-19, 11-22, 13-23, 15-25, 16-26, 17-28, 19-31, 21-34, 22-56, 23-35, 24-36, 26-39, 29-43, 31-44, 32-45, 37-16, 41-53, 47-55, 48-56, 51-57, 52-58.

The relatively large sample size of Queen Elizabeth (68 teachers and 1312 students) would tend to cause problems because of the nature of the Chi Square, but to less of an extent as experienced in the results from Victoria and Jasper Place Composites. An examination of the complete results in Appendix B reveals that again the general opinion trends of the teachers and students coincided on all but three of the twenty-three items on which significant differences were recorded. Direct opposition occurred in their opinions concerning overall effort in homework, the effect of the eighty-minute period on student attendance, and the effect of the eighty-minute period on homework effort. In all cases the students felt that the situations covered by these items were improved by semestering or the eighty-minute period, while the teachers saw negative effects.

5. McNally Composite. An examination of Table XVIII reveals that there were no significant differences between the opinions of teachers and students (Hypothesis 3 accepted) for nine of the thirty items in this section.

Hypothesis 3 was accepted for the following items which are recorded in Table XVIII: 15-25, 18-30, 19-31, 23-35, 25-37, 27-40, 28-42, 29-43, 33-46.

Hypothesis 3 was rejected for the following items: 7-15, 8-16, 9-19, 10-21, 11-22, 13-23, 16-26, 17-28, 21-34, 22-56, 24-36, 26-39, 31-44, 32-45, 37-16, 38-51, 41-53, 47-55, 48-56, 51-57, 52-58.

Here also the problem of the Chi Square mentioned previously would tend to have an affect due to the relatively large sample size at McNally Composite (65 teachers and 1063 students). An examination of the complete results in Appendix B reveals that although significant differences were recorded on twenty-one items, the overall opinion trends of the teachers and students generally coincided on all but one item. On Item 38-51 concerning the effect of the eighty-minute period on maintaining class discipline, the teachers felt that discipline was positively affected while the students felt that it was worsened.

The results presented in Table XVIII also reveal that there were no significant differences between the opinions of teachers and students (Hypothesis 3 accepted) in all five of the high schools tested for items 18-30, 25-37, and 27-40 concerning respectively course enrichment, strain on teachers, and the sufficiency of the mid-semester report under the semester system. There were significant differences between the opinions of teachers and students (Hypothesis 3 rejected)

in all five of the high schools tested for items 7-15, 8-16, 17-28, 21-34, 26-39, 37-16, and 47-55, concerning respectively the effort of students in class and in homework, the teaching of skill subjects, students' attendance, continuity of clubs, students' effort in homework under the eighty-minute period, and the use of discussion groups, committees, etc. under the eighty-minute period.

Acceptance of Hypothesis 3 for four of the five schools was in evidence for none of the items listed, while rejection of Hypothesis 3 for four of the five schools was shown for items 9-19, 13-23, 22-56, 24-36, 29-43, 31-44, 41-53, and 51-57 concerning respectively individual attention for students, limitation of students' educational growth, student achievement, students' study habits, the overall favorability of semestering, the appropriateness of the eighty-minute period for the above-average student, the use of the library and student attendance under the eighty-minute period. In seven of the eight cases just mentioned, the one school in opposition to the other four was Strathcona Semester.

In summary, there were thirty items included in this category and five schools involved, giving 150 separate cells to be tested under Hypothesis 3. Hypothesis 3 was accepted in 54 (36%) of these cases and rejected in 96 (64%) of these cases. It should also be noted that in only a total of thirteen items were the teachers' and students' opinions directly opposed.

SUMMARY OF CHAPTER IV

The purposes of the chapter were to report in detail the opinion

trends of the teachers and the students concerning the semester system, and to determine if there were any statistically significant differences among the opinions of the teachers of the five high schools tested, among the opinions of the students of the five high schools tested, and between the opinions of the teachers and students of each of the five high schools considered individually.

In dealing with the opinion trends of the teachers and students, the mean percentages for the two groups were computed for each item considered. The response to a particular item was considered to be positive toward the semester system if the percentage of the group being surveyed and responding positively was greater than the percentage responding negatively. The items of the opinionnaire were divided into five categories. Four of the categories dealt with various aspects of the semester system such as the teaching process, and the impact on the student, and one category dealt with the effects attributable to the eighty-minute period.

Opinion Trends of Teachers and Students

Generally the reaction of the teachers and students was more positive than negative concerning the semester system. Positive or negative responses to the semester system were elicited on 43 items of the teachers' opinionnaire. The teachers reacted positively to 28 (65%) of these items, and negatively to 15 (35%) of these items. On the 41 items of the students' opinionnaire eliciting positive or negative responses, the students' reacted positively to 30 (73%) of these items and negatively to 11 (27%) of these items. On the average

34% of the teachers and 36% of the students reacted positively to semestering, while 19% of the teachers and students reacted negatively. An average of 31% of the teachers and 29% of the students felt that the general situation under the semester system was no different than under the previously used ten-month year.

Concerning Categories T2 and S2, the "Teaching Process" and "Teacher Presentation", students and teachers agreed that the semester system tended to allow more opportunities to give individual attention to students and to enrich the courses, tended to be superior to the ten-month year in facilitating subject-matter concepts, in mastering factual material, in facilitating creativity and in the handling of skill subjects such as typing. The semester system was seen to be resulting in more intensive instruction, in more marking and lesson preparation time for the teachers, and was tending to increase the requirements for audio-visual equipment to provide some variety during the longer classes.

Concerning Categories T3 and S3, the "Impact on the Student", the students reported that their overall work load and the time needed for preparation for examinations was lessened under the semester system. Teachers and students agreed that the students tended to put forth more effort in semestered classes, but while the students tended to feel that they had put forth more effort in homework in semestered classes, the teachers reported less effort in homework. The students reported that they tended to find the learning of factual material and skills such as typing easier under the semester system, and reported that the overall learning situation in academic subjects was superior

under the semester system. The teachers reported that students' attendance and achievement was improved, but teachers and students agreed that absenteeism was more serious in the semestered classes since more work was covered per class. The students felt that the semester system tended to put more of a strain on them than did the ten-month year plan.

Concerning Categories T4 and S4, "The Eighty-Minute Period", the teachers felt that the length of the eighty-minute period was suitable for their purposes, and they agreed with the students that the length of the eighty-minute period was appropriate for the average and above-average students. However, both groups tended to feel that the eighty-minute period was too long for the below-average students. The students reported that while the eighty-minute period tended to provide them with more time to work at their own speed, it also tended to increase their homework load. A tendency of increased lesson preparation time and marking load was reported by the teachers. The students felt that they tended to put forth more effort in homework in the eighty-minute period, but the teachers were again in opposition concerning this. Teachers and students agreed that the eighty-minute period had not been the cause of absenteeism, vandalism, etc., and in fact they reported a tendency of improved student attendance because of the eighty-minute period. Teachers and students also tended to feel that the eighty-minute period caused an increase in the use of audio-visual aids, allowed for more discussion groups, student research projects, guest speakers and field trips, allowed the teachers to be more flexible in class, and provided more opportunity for the teachers

to give individual attention to the students. The teachers felt that instruction in the eighty-minute period tended to be more intensive resulting in more of a demand on the teachers' nervous energy.

Concerning Categories T5 and S5, "Miscellaneous", it was seen as advantageous by both teachers and students to meet a new group of teachers and students in the second semester. Teachers and students felt that they tended to get to know one another better under the semester system. The semester system did not seem to hinder the completion of curriculum requirements according to the reports of students and teachers, but both groups did feel that the teachers tended to be under more of a strain in semestered classes. Teachers and students seem to be strongly in favor of the semester system as an average of 77% of the teachers and 83% of the students recorded affirmative responses to the question which asked "Do you favor the semester system?".

Measurement of Opinion Differences

To compare the opinions of the teachers across the five schools, the students across the five schools, and the students' opinions versus the teachers' opinions in each of the five schools individually the Chi Square statistic was calculated. The level of significance accepted in all cases was $p \leq 0.01$.

A summary of the results concerning the opinions of the teachers across the five schools reveals that significant differences were found (Hypothesis 1 rejected) among the opinions of the teachers on 33 of the 49 items (67%). Significant differences were found

(Hypothesis 2 rejected) among the opinions of the students across the five schools on all 46 of the items dealt with. The large student sample size (N = 5717) and its effect on the calculation of the Chi Square statistic undoubtedly had a bearing on these student results.

A summary of the results concerning the opinions of the students versus the opinions of the teachers in each of the five schools separately reveals that no significant differences were found (Hypothesis 3 accepted) between the opinions of students and teachers on 22 of the 30 items answered by the Strathcona Semester groups, on 10 of the 30 items answered by the Victoria Composite groups, on 6 of the 30 items answered by the Jasper Place Composite groups, on 7 of the 30 items answered by the Queen Elizabeth groups, and on 9 of the 30 items answered by the McNally groups. However, it must be noted that in most cases the opinions of the teachers and the students were in agreement, but statistically significant differences showed up because though their opinions did usually coincide, the percentages of the teachers and students with coinciding opinions did vary. Considering all of the items dealt with by the five schools, in only thirteen instances did the opinions of the students and teachers conflict, and in most of these instances the subject of disagreement was students' effort in homework. The older and mature students' of Strathcona Semester appear to be in much stronger agreement with their teachers than any of the other groups. However, Strathcona Semester has by far the smallest sample size, and the nature of the Chi Square Statistic mentioned previously possibly had an elevating effect on the differences encountered in the opinions of students and

teachers of the more populous schools.

With few exceptions the results tend to support the semester system. The teachers and the students surveyed have reacted very positively to the semester system generally and also specifically to the eighty-minute period being used.

CHAPTER V

SUMMARY, GENERALIZATIONS AND IMPLICATIONS

SUMMARY OF THE STUDY

The purposes of the study were to survey the opinions of teachers and students in the Edmonton Public high schools concerning the semester system in which they were involved during the 1969-70 school year, and to determine whether or not significant opinion differences exist among the opinions of teachers and students across the five high schools tested, and between the opinions of teachers and students in the five schools individually. Opinionnaires were administered to all of the teachers (N = 347) and all of the students (N = 5717) of Strathcona Semester, Victoria Composite, Jasper Place Composite, Queen Elizabeth Composite and McNally Composite high schools.

The analysis of the results initially involved a gross analysis of the opinion trends of the teachers and students to establish whether or not there were overall positive or negative feelings towards the semester system. Secondly, to establish whether or not significant differences were present in the opinions of the above mentioned groups, Chi Square analysis was utilized.

The items were divided into five categories for ease and clarity of reporting results. The items of the teacher's opinionnaires were categorized as follows: Category T1 -- Personal Information; Category T2 -- Teaching Process; Category T3 -- Impact on Student; Category T4 -- The Eighty-Minute Period; Category T5 -- Miscellaneous.

The items of the students' opinionnaires were categorized as follows: Category S1 -- Personal Information; Category S2 -- Teacher Presentation; Category S3 -- Impact on Student; Category S4 -- The Eighty-Minute Period; Category S5 -- Miscellaneous. The reporting of the results was carried out under two main headings, namely "The Opinion Trends of the Teacher and Student Samples" and "Measurement of Opinion Differences".

The opinion trends of the teachers and students were outlined, compared and discussed category by category. The opinion differences were dealt with by testing each item concerned against the following three hypotheses:

Hypothesis 1: There are no significant differences among the opinions of the teachers across the five schools being tested on each of the items of the opinionnaire.

Hypothesis 2: There are no significant differences among the opinions of the students across the five schools being tested on each of the items of the opinionnaire.

Hypothesis 3: There are no significant differences between the opinions of the teachers and the opinions of the students in the five schools individually on the items of similar intent on the teacher and student opinionnaires.

REVIEW AND DISCUSSION OF THE FINDINGS

A. Opinion Trends of the Teacher and Student Samples

1. Categories T2 and S2 - Teaching Process and Teacher

Presentation. The results of these two categories reveal a general agreement between the opinions of students and teachers. The semester system was seen to provide more opportunity to give individual attention to the students in academic subjects, and tended to result in more enriched and fuller courses. About half of the teachers and students felt that instruction was more intensive under the semester system. The teachers reported that more time was needed for lesson preparation and marking, and more audio-visual equipment was needed under the semester system. The teachers also tended to feel that the semester system was superior in facilitating subject matter concepts, in mastering factual material, in facilitating creativity and in teaching skill subjects such as typing. On the nine teachers' items contained in Category T2, an average of about one-third of the teachers felt that the situation under the semester system was no different than under the ten-month year, while on the four students' items in Category S2, an average of about one-third of the students expressed this feeling. On the items eliciting a positive or negative response to the semester system, positive responses were given by an average of 40 percent of the teachers and 31 percent of the students. Negative responses were given by an average of 11 percent of the teachers and 15 percent of the students.

The overall responses of the teachers and the students to the items of this category tend to support the use of the semester system. The teachers reported having greater work loads due to marking and lesson preparation, but from their responses and those of the students, this added work output appears to be resulting in more effective, more

enriched and generally fuller courses. Whenever the system, or individual courses are changed, additional work is required initially to adapt to the new situation, but usually after one becomes familiar with the new situation the work load levels off. As a point in fact, 29 percent of the Strathcona Semester teachers reported less of a marking load possibly because they have been using the semester system for longer than the other four groups.

2. Categories T3 and S3 - The Impact on the Student. While in the previous categories the teachers reported an increased work load under the semester system, the results of this category indicate that the students tended to spend less time in examination preparation and were generally required to work less in semestered classes. One-third of the teachers and one-half of the students reported that the students had put forth more effort in semestered classes, however about one-fifth of the teachers felt that less student effort was prevalent in homework,while just less than one-half of the students felt that they had put more effort into their homework. However, a point of confusion possibly existed concerning effort in homework, since in many courses the students were allowed to work on their homework assignments during the latter portion of the eighty-minute period. Thus, even though as much or more effort was being put forth on homework assignments, the effort needed for work at home would be lessened. During these homework sessions the teachers often are able to circulate and help individual students with their problems, which could have a bearing on the increase in individual attention given to students as was reported in the previous categories.

Two-thirds of the teachers and one-half of the students saw the necessity of regular attendance in semestered classes. Since the semestered class periods are twice as long, with presumably twice as much material being covered on the average per period, a student tends to fall behind twice as fast as under the ten-month year when classes are missed. This perhaps has a bearing on the increase in attendance reported by one-quarter of the teachers. Student achievement was also reported to have improved by one-third of the teachers. While these attendance and achievement trends are based only on opinion, and should be substantiated by empirical data, the opinions are of course strongly affected by the attendance and achievement figures that the teachers have dealt with continually. The results seem to indicate that the semester system is detrimental in the case of the student, who for one reason or another, misses classes, since the student misses more work, tends to fall behind twice as fast on the average compared to the ten-month courses, and may be forced to drop the course more quickly. However, this same student may take the course again in the next semester, which tends to offset the problem.

The results of these two categories also lean positively toward the semester system with an average of 27 percent of the teachers and 29 percent of the students giving positive responses, while only 10 percent of the teachers and 18 percent of the students gave negative responses. A substantial percentage of teachers (38 percent) and students (30 percent) felt that the situation under the semester system was no different than under the ten-month year.

3. Categories T4 and S4 - The Eighty-Minute Period. In the semester system being used in the Edmonton School systems, classes are held for eighty minutes each day. The results of these two categories appear to indicate that the eighty-minute period has been well accepted by the teachers and students surveyed. Sixty-nine percent of the teachers felt that the eighty-minute period was of satisfactory length for their purposes. A majority of teachers and students felt that the eighty-minute period was of satisfactory length for the average and above average students, but two-thirds of the teachers and about one-half of the students felt that it was too long for the below-average student. In most cases the courses that are offered specifically to the below average students have not been semestered but are offered for forty minutes a day for the whole year. Thus the reported advantages of the semester system are lost to the below-average student because the longer period is seen as inappropriate for this group. Perhaps what is needed are changes in approach such as the laboratory oriented sciences, which would possibly be more suitable for the below-average student in the eighty-minute period. It seems a pity that one group of students cannot experience the semester system for themselves because they are below average and presumably cannot adapt to the longer period.

The eighty-minute period reportedly provided the students with more opportunity to work at their own speed but also tended to produce greater amounts of work. The teachers again reported an increased lesson preparation and marking load and felt that the students put forth more effort in semestered classes but less effort into homework.

About one-third of the students reported a greater homework load in semestered classes, which should be the case since in a given period approximately twice as much material may be covered requiring on the average twice as much homework. Again, as previously explained, some confusion possibly arises concerning homework since it is often possible to complete at least part of the homework assignment during the class period.

While one-quarter of the students felt that behavior was worse during the eighty-minute periods, 60 percent of the teachers felt that discipline problems were no different in the eighty-minute period than under the forty-minute period. The eighty-minute period reportedly required and allowed the use of more audio-visual equipment, more student discussion groups, research projects, etc., more use of outside resources such as field trips and guest speakers and more use of library facilities. Teachers and students agreed that students' attendance and achievement were also positively affected by the use of the eighty-minute period. Instruction was reported by the teachers to be more intensive under the eighty-minute period, which resulted in a greater demand on the nervous energy of the teachers. The eighty-minute period reportedly resulted in more individual attention being given to students, allowed the teachers to get to know the students better and to be more flexible in their approach in class.

Of the twenty-four items in the teacher's part of this category, seventeen were answered in favor of the eighty-minute period. Of the fifteen items in the students' part of the category, ten were

answered in favor of the eighty-minute period. On the items eliciting a positive or negative response to the eighty-minute period, positive responses were given by an average of about one-third of the teachers and just less than half of the students, while negative responses were given by an average of one-fifth of the teachers and one-quarter of the students. The feeling that the situation under the eighty-minute periods was no different than under the shorter periods of the ten-month year was expressed by about one-third of the teachers and students.

Thus, the eighty-minute period, which is part and parcel of the semester system has generally been more positively than negatively accepted by the teachers and students. While the longer periods have perhaps resulted in more work in some areas and more intensified instruction, in most cases the results indicate that the teachers have had to change their overall approach to their subjects to accommodate the longer periods, and many beneficial occurences have apparently resulted because of these changes.

4. Categories T5 and S5 - Miscellaneous. After the semester break, teachers and students are faced with new classes and the resulting new acquaintances. About one-half of the teachers felt that it was advantageous to meet new students in the second semester, and two-thirds of the students agreed that it was advantageous to meet new teachers after the semester break. Both teachers and students reported that they became more familiar with one another under the semester system. Teachers and students felt that the semester system had placed them under more of a strain. Both also agreed that no

problems were encountered in completing curriculum requirements in semestered classes. The semester system was strongly supported by the results of the teachers' and students' items which asked in essence "Do you favor the semester system?". The results showed that an average of 77 percent of the teachers and 83 percent of the students answered in favor of the semester system. Thus when all had been considered and a choice had to be made, a large majority of teachers and students expressed favor for the semester system compared to the ten-month year.

Of the eight items comprising the teachers' part of this category, six were answered in favor of the semester system. Of the twelve items comprising the students' part of this category, ten were answered in favor of the semester system. On the items eliciting a positive or negative response to the semester system, positive responses were given by an average of about one-half of the teachers and students, while negative responses were given by an average of one-sixth of the teachers and students. The feeling that the situation under the semester system is no different than it was under the ten-month year was expressed by an average of one-third of the teachers and students.

In summarizing the results of the opinion trends of the teacher and student groups, one is left with the strong feeling that the semester system and its accompanying eighty-minute period has been well accepted by these two groups. Positive or negative responses to the semester system were elicited on forty-three items of the teachers' opinionnaire. The teachers reacted positively on the average to twenty-

eight and negatively to fifteen of these items. On the forty-one items of the students' opinionnaire eliciting positive or negative responses, the students reacted positively on the average to thirty and negatively to eleven of these items. Overall, an average of approximately one-third of the teachers and students reacted positively to semestering, while about one-fifth of the two groups reacted negatively. An average of approximately one-third of the teachers and students felt that the situation under the semester system was no different than under the ten-month year.

B. Measurement of Opinion Differences

In the first section of these results, the gross opinion trends of the teachers and students were categorized and compared. To decide whether the specific differences recorded were statistically significant, Chi Squares and associated probabilities were calculated for each item. Hypothesis one dealt with differences among the opinions of the teachers across the five schools. Hypothesis two dealt with differences among the opinions of the students across the five schools. Hypothesis three dealt with differences between the opinions of the students and teachers from each school individually. In keeping with the organization of the previous section, the teachers' opinion differences (Hypothesis 1) and the students' opinion differences (Hypothesis 2) will be dealt with together under each separate category.

Hypothesis 1: There are no significant differences among the opinions of the teachers across the five schools being tested on each of the items of the opinionnaire.

Hypothesis 2: There are no significant differences among the opinions of the students across the five schools being tested on each of the items of the opinionnaire.

How meaningful the recorded differences are, and what generalizations can be drawn on the basis of these differences is a debatable point. However, taking into consideration several points such as the differing situations of the five schools, including the age and maturity of their students and the length of time that they have been experiencing the semester system, the writer has speculated as to the probable causes of some of the opinion differences noted.

The results of Category T2, the "Teaching Process", revealed that significant differences among the teachers' opinions were found on five of the ten items of this category. While the opinions of the teachers of four of the schools generally coincided, the opinions of the Strathcona Semester group were in opposition on four of the five items. The opinions of the Strathcona Semester teachers that were in opposition were the following: the Strathcona Semester group detected less of a marking load; they considered semestering to be a hindrance to the facilitation of creativity and course enrichment, and they reported that semestered classes did not require more audio-visual equipment. The semester system had been in use for three years at Strathcona Semester while it had been in use for two years at two of the other schools and one year at two of the other schools. This added experience coupled with the fact that only grade twelve subjects are offered at Strathcona Semester to a group of older, more mature students perhaps has resulted in this opposition of opinion. Signifi-

cant differences among teachers' opinions were also recorded concerning the facilitating of the understanding of subject-matter concepts. No significant differences were found among teachers' opinions concerning class preparation time, the opportunity to give individual attention to students, facilitating student mastery of subject-matter material, the teaching of skill subjects and the intensity of instruction.

Hypothesis 2 was rejected for all forty-six of the students' items dealt with for reasons explained earlier. The results of Category S2, "Teacher Presentation", are of course fully presented in Chapter IV and rather than duplicate these results here, only the trends noted will be discussed. The Strathcona Semester students reacted most positively concerning the individual attention they had received. The smaller classes at Strathcona Semester may have had a bearing on this result. The press for the final examination possibly was a factor contributing to the 70 percent of Strathcona Semester students who reported finding instruction more intensive in semestered classes.

The results of Category T3, the "Impact on the Student", revealed that significant differences were found among the opinions of teachers on five of the seven items. Significant differences were found concerning students' effort in class and in homework, students' attendance and achievement, and the dropout problem under the semester system. While all four groups of teachers felt that the students put forth more effort in class, only one school felt that more effort had been put forth in homework. As previously explained, possible confusion existed concerning the interpretation of "homework". There were no significant differences among the opinions of teachers

concerning students' study habits and students' educational growth.

The results of Category S3, the "Impact on the Student", reveal that significant differences were found among the opinions of the students on all of the items of this category. The students of Strathcona Semester felt most strongly that more work and pressure had resulted because of semestering, while the students of Queen Elizabeth were consistently the least positive about the semester system. Again the pressures associated with preparing for Grade Twelve Departmentals possibly have affected the opinions of the Strathcona Semester group, while the problems associated with trying to semester only a few subjects in a first year with semestering possibly resulted in the less favorable impression expressed by the Queen Elizabeth students. Although, as previously mentioned, by experiencing both semestered and full year classes at the same time, perhaps the Queen Elizabeth students were in a more favorable position to realistically appraise the semester and ten-month plans.

The results of Category T4, "The Eighty-Minute Period", revealed that significant differences among teachers' opinions were found on seventeen of the twenty-four items in this category. The results varied greatly and few trends were discernable. However, it can be noted that on the items concerning the appropriateness of the length of the eighty-minute period for teachers, above average, average and below average students, the responses of the Queen Elizabeth teachers were least positive on all four items. Overall, the responses of the Strathcona Semester and Queen Elizabeth teachers tended to be less positive than those of the teachers of the other three schools. It

is interesting to note that of the five schools, these two are least typical of the normal semester situation, and consistently show up at odds to the other three schools. Again, the special situation at Strathcona may have affected the opinions of the teachers. The problems experienced by Queen Elizabeth teachers may have resulted in their less positive opinions, but perhaps by experiencing the eighty-minute periods and the forty-minute periods together, they were in a better position to more realistically assess the eighty-minute period. There were no significant differences among the opinions of teachers concerning lesson preparation time, marking load, effort put forth by students, individual attention given to students, the use of audio-visual equipment and library facilities, flexibility in classroom presentation, the intensity of instruction, inappropriate student behavior, and the problem of missing and dropping classes because of the eighty-minute period.

The results of Category S4, "The Eighty-Minute Period", revealed that significant differences were found among the opinions of students on all of the items in this category. While the results of this category did not show any one school or schools as being consistently high or low, the students of Strathcona Semester tended to re-emphasize that they felt an increase in volume and intensity in their work and that they detected small increases in the use of library facilities and outside resources because of the use of the eighty-minute period. As previously mentioned, their greater age and maturity were possibly reflected in their positive and opposing responses to the items concerning behavior and attention in class. The

Queen Elizabeth students were least positive on six of the fifteen items of this category, again reflecting either their relative displeasure with, or perhaps more realistic assessment of the eighty-minute period, as explained previously.

The results of Category T5, "Miscellaneous", revealed that significant differences were found among the opinions of the teachers on five of the eight items in this category. No significant differences were found concerning getting to know the students, completion of curriculum requirements, and the strain on teachers. An examination of the results revealed that on the items where significant differences occurred, no one school or schools consistently caused these differences. However, it was noted that on the item which asked, "Do you favor the semester system?", only 49 percent of the Queen Elizabeth teachers replied in the affirmative, while an average of 81 percent of the teachers of the other four schools did so. A reserved acceptance of the semester system by the Queen Elizabeth teachers was noted throughout this section, which, as previously mentioned may have been due to this group having had a less enjoyable experience with the semester system, or due to the Queen Elizabeth teachers having been in a position to more realistically assess the semester system.

The results of Category S5, "Miscellaneous," revealed that significant differences among student opinions were found on all of the items of this category. Results varied a great deal with few trends emerging. However, it is interesting to note that the students from the two schools experiencing the semester system for the first

time recorded the lowest positive votes concerning the completion of curriculum requirements. Perhaps in their first experience with the semester system, the teachers had relatively more difficulty in completing their courses than did the teachers who had experienced the semester system for longer periods.

The third and final hypothesis is concerned with the measurement of opinion differences between teachers and students at each high school separately.

Hypothesis 3: There are no significant differences between the opinions of the teachers and the students of each of the five schools individually on the items of similar intent on the teacher and student opinionnaires.

Significant differences were found between the opinions of students and teachers (Hypothesis 3 rejected) on eight of the 30 items answered by the Strathcona Semester teachers and students, on 20 of the 30 items answered by the Victoria Composite groups, on 24 of the 30 items answered by the Jasper Place Composite groups, on 23 of the 30 items answered by the Queen Elizabeth Composite groups, and on 21 of the 30 items answered by the McNally Composite groups. However, in most cases the differences resulted from varying degrees of coinciding opinions, since on only a total of thirteen items were the teachers' opinions directly opposed to the students. Hypothesis three was accepted by the groups from all five high schools for the items concerning course enrichment, strain on teachers, and the sufficiency of the mid-semester report. Hypothesis 3 was rejected by the groups from all five high schools for the items concerning the effort of

students in class and in homework, the teaching of skill subjects, student attendance, continuity of clubs, students' effort in homework under the eighty-minute period, and the use of discussion groups, committees, etc., under the eighty-minute period.

Acceptance of Hypothesis 3 for four of the five schools was in evidence for none of the items listed, while rejection of Hypothesis 3 for four of the five schools was shown for items concerning individual attention, limitation of students' educational growth, student achievement, students' study habits, the overall favorability of semestering, the appropriateness of the eighty-minute period for the above-average student, the use of the library, and student attendance under the eighty-minute period. The two items that resulted in opposing opinions of students and teachers consistently concerned overall effort in homework and the effect of the eighty-minute period on homework effort. In all cases the students felt that they were putting more effort into their homework while the teachers felt that less effort was forthcoming.

It was also noted that because of the effect of large samples on the calculation of the Chi Square statistic, the schools with larger samples would perhaps appear to have larger numbers of items showing significant differences between teachers' and students' opinions than would have been the case if their sample had been smaller. Thus a given difference between the opinions of the teachers and students might not show up as significant in the Strathcona Semester section, whereas it might show up as significant in the Jasper Place or Victoria section.

GENERALIZATIONS

The generalizations presented here were arrived at on the basis of the evidence gathered through the analysis of the data contained in the study. The evidence seems to suggest that the following generalizations are warranted with regard to the opinions of the teachers and students questioned concerning the semester system.

The overall opinions of the teachers and the students tend to be more positive than negative towards the semester system and the eighty-minute period. The results of some of the more significant items reveal the following trends to be present. Under the semester system, the students tend to receive more individual attention. This is perhaps due at least in part to the use of the eighty-minute period which often allows the teacher time to help the students with work in class. The facilitation of the understanding of subject-matter concepts, the mastering of factual material, the facilitation of creativity, and the learning of skills such as typing also tend to be improved under the semester system. The teachers report that they tend to be more flexible in their approach to their lessons possibly because the longer class period demands the use of a variety of approaches to keep the attention of the students. This seems to be the case since teachers and students report that more audio-visual equipment is needed, more guest speakers and field trips are utilized, library facilities are used more, student discussion groups and research projects have been increased, and generally courses tend

to be more enriched and fuller under the semester system. The students tend to feel that they had put forth more effort in class and in homework, attended more regularly, achieved better marks and improved their study habits because of semestering. Also, it was generally regarded as an advantage to meet a new group of teachers and students in the second semester. The new semester seems to give both teachers and students a fresh outlook. It allows the teachers to evaluate the results of the past semester and to make improvements in the second semester, and it allows the students to go on to new courses and teachers or to repeat the ones that were failed.

On the negative side the teachers report that more time seems to be needed for marking and examination preparation. It is possible that when the teachers become more accustomed to the semester system, this increased load will level off. Instruction under the semester system is felt to be more intensive and to put more of a strain on both teachers and students. The intensive instruction perhaps results from the compression of the full-year courses into half a year. The pressure should be somewhat alleviated by the fact that only half as many courses have to be dealt with in a semester. However, things do move along very quickly in a semestered course and some strain will undoubtedly result. Missing classes under the semester system is considered to be more serious since the periods are twice as long and presumably twice as much material is covered on the average. Thus a student falls behind much more quickly when semestered classes are missed and soon may be so far behind that the course has to be dropped. Thus the drop-out problem may be accentuated by the semester system.

However, a first semester drop-out may drop back in for the second semester. Both teachers and students feel that the eighty-minute periods are too long for the below-average student, and the students report that they tend to have more trouble sustaining their attention for the full eighty-minute period. The teachers report that semestering has tended to make them more flexible. Perhaps as this flexibility increases, the below-average as well as the other groups of students will be kept interested and active for the full eighty-minute period.

While the overall reaction to the semester system by teachers and students was more positive than negative, an appreciable proportion of both groups (approximately 30 percent) were consistently of the opinion that the situation encountered in the semester system and in the eighty-minute period were no different than those experienced in the ten-month year with its shorter periods. Therefore, about one-third of the total group surveyed would presumably be equally happy under either system.

Although the overall reaction to the semester system by teachers and students was more positive than negative, a considerable divergence of opinions did exist. Significant differences were found among the opinions of the teachers across the five schools on 33 of the 49 items dealt with, and among the opinions of the students across the five schools on all 46 of the items dealt with. However, it was noted that the large student sample, (N = 5717) did possibly have an enlarging effect on the calculated Chi Squares resulting in the large numbers of statistically significant differences recorded.

When the opinions of the teachers of a particular high school

in the test group were compared with the opinions of the students of that same high school, significant differences were found between the opinions of these teachers and students in a majority of cases. An exception was Strathcona Semester School, where significant differences between teachers' and students' opinions were recorded on only eight of 30 items dealt with. Significant differences were found on an average of 22 of the 30 items dealt with by the four other schools. At least two factors could have a bearing on these results. The students of Strathcona Semester are on the average older and more mature than the students of the other four schools and perhaps do share more common feelings with their teachers. Also, the Chi Square is often affected upwards when large samples are involved. Strathcona Semester has by far the smallest population. Thus a given difference between the opinions of the Strathcona Semester groups could possibly not show up as significant, whereas the same difference might conceivably show up as significant at any of the other four schools.

The majority of the teachers and the students of the five high schools surveyed indicated that they would rather continue with the semester system than go back to the ten-month year. An average of 77 percent of the teachers (Range from 49% to 91%) and 83 percent of the students (Range from 71% to 91%) answered the question "Do you favor the semester system?" in the affirmative. The lowest positive reactions were received from the teachers and students of the school in which only some of the classes were semestered. This required many of the teachers to prepare a semestered class and a full-year class in the same subject. Perhaps this added work load, the confusion resulting

from the use of both year system, and the uncertainty of the first exposure to the semester system had a bearing on the results. However, perhaps by being exposed to semestered classes and full year classes concurrently this group was more able to realistically assess the semester system compared to the ten-month year.

The results of this study effectively parallel the results of the questionnaires circulated by the Calgary Public School Board (1970) reported in the review of the literature. The perceived advantages and disadvantages of the semester system reported in the Calgary study have virtually all been substantiated by this study. Fehlberg (1968) found some significant achievement gains in favor of semestered Social Studies 30. The achievement gains reported in this present study are not on Grade XII Departmental examinations and are wholly unsubstantiated by empirical data. Of the nineteen advantages of the semester system recorded by Arnot (1969, p. 147), nine of these advantages were reiterated in this study. Specifically these advantages concern the following: getting to know the students better; students may work on assignments under the teacher's supervision; there is a possibility of earlier program completion; changing classes after semester break is advantageous; more individual attention results; the students are in favor of the semester system which is a motivator; the semester system is better for students who tend to drop out due to the ten-month period; student attendance improves; and discipline problems are decreased. Of the seventeen disadvantages recorded by Arnot, (p. 148), four were noted in this study. Specifically these disadvantages concerned the following: the

adverse effect of student and teacher absenteeism; the possibility that students' educational growth suffers; the semester system is harder on the poorer student and slow learners; and the semester system adversely affects the extra-curricular program. Arnot's study elicited only the opinions of the principals while this study has questioned teachers and students and has resulted in a more extensive list of possible advantages and disadvantages of the semester system.

IMPLICATIONS

The findings of this study suggest some implications with respect to the use of the semester system in Edmonton or elsewhere. However, before these implications are made it should be emphasized that while the previously stated generalizations were based on the results of the analysis of the opinions of students and teachers concerning the semester system, the use of the semester system was not the only independent variable present in the study. In addition to the limitations stated in Chapter I the results were undoubtedly affected by the fact that the individual school situations varied concerning the programs offered, the school size, the previous semester experience of students and teachers, and the method and extent of the utilization of the semester system. However, fully realizing that the results must be taken in the proper perspective, the following implications have been put forth.

The teachers and students of the five schools tested, while exhibiting a wide divergence of opinions, did generally favor the semester system. While many inherent disadvantages of the semester

system were pointed out, the results would seem to indicate that the perceived advantages outweigh the disadvantages both in number and relative importance. Schools planning to experiment with the semester system should of course view the results in relation to their own particular situation, but the trend of the results appears to be such that schools should at least be encouraged to try the semester system for themselves.

The semester system and the longer eighty-minute period used appears to have caused most teachers to change their instructional approach. The students apparently do not react very positively to eighty-minute lectures, and most teachers indicate that they are varying their lessons to include more audio-visual aids, more use of library facilities, more use of student research projects and discussion groups, and more use of outside resources such as guest speakers and field trips. Many of these effects were possibly due as much to the use of the eighty-minute period as to the use of a semester system. Perhaps many of the cited advantages could be realized by the use of longer periods on a full-year basis without changing over to a semester system.

The semester system has apparently resulted in a more intensive type of instruction that has reportedly tended to place more of a strain on teachers and students. This reported strain did not appear to have seriously affected the performance of most of the students, as teachers and students agreed that students' study habits, attendance and achievement tended to be improved in semestered classes. However, both groups felt the more intensive instruction and longer

periods to be unsuitable for below-average students. In many cases the courses designed for the below-average group have been left unsemestered. Perhaps by altering the nature and approach of the courses being offered the instruction could be made more suitable for the needs of these students. It would be unfortunate to prohibit the below-average students from gaining possible benefits from the semester system merely because of unsupported opinion concerning its unsuitability for them. Perhaps more study is needed concerning the suitability of, and possible changes needed in the semester system to make it more suitable to the below-average students.

The skipping of classes in the semester system was regarded as doubly serious since each period is twice as long, with on the average twice as much material being covered per period. Thus students who miss classes tend to fall behind more quickly and may be forced to drop the class. The drop-out problem is a serious one and could be accentuated by the semester system, although if a student dropped a class in the first semester he has the opportunity to register in the class again in the second semester. Having two points of entry each year gives the semester system more flexibility in accommodating the needs of the students who may require only one or two courses.

The rising costs of education might be somewhat alleviated by the use of a full semester system and summer school program in which a good student could complete his high school requirements in two years. Presumably a more efficient use of the school plant and the teaching staff would result. However, those involved in all year plans in operation in the United States have not as yet reported any significant

savings.

The semester system is a break from the traditional ten-month school year that has been in use for decades in Canada and the United States. So far the semester system has received very positive responses from those who have been involved in it. The trimester system has been used successfully in Red Deer for many years, and the experimental use of a quarter system has been rumored. Only by experimentation with new systems of school-year organization will school boards be able to properly assess the suitability of the new system for their particular needs. More experimentation and evaluation and less "wait and see" perhaps are warranted.

As previously mentioned, many of the advantages attributed to the semester system generally are perhaps in reality due more to the use of the eighty-minute period. The longer period tends to give the teachers more time to do many things that were difficult to accomplish in the shorter periods. Field trips, guest speakers, laboratory experiments and student projects can all be better accommodated by the longer period. However, the longer period is perhaps not always suitable. It has been reported in the review of the literature that for one, French teachers often find the eighty-minute periods to be too long for the new audio-visual French courses. Possibly what is needed is a system of organization with a built-in flexibility to allow not only the use of a variety of period lengths but to also allow the students to work their way through their courses at rates appropriate to their individual abilities and interests. At present, the review of the literature would indicate that Alberta is one of

the leaders in the field of school-year reorganization in Canada. It is hoped that this leadership role will be sustained.

RECOMMENDATIONS FOR FURTHER STUDY

The semester system is a relatively recent innovation in Alberta and is relatively unknown in Eastern Canada, thus leaving many research problems open for study.

1. This study was a collection and analysis of the opinions of students and teachers concerning such areas as student achievement, student attendance, drop-outs, the use of audio-visual aids, etc. The opinions recorded indicated that the semester system had various affects on these areas. A study or studies could be set up to measure students' achievement, attendance, etc. in semestered classes compared to the situation in ten-month classes. Fehlberg (1968) carried out some achievement measures. However, much more could be done concerning the empirical verification of many of the opinions recorded in the present study.

2. The semester system is undoubtedly more suitable to some subject areas than others. A survey of the teachers and students in the separate subject areas such as English, Science, Mathematics, Foreign languages, etc. could be conducted to assess the suitability of the semester system for these individual areas.

3. The semester system is being used in Junior High Schools in some parts of the province. Using a design comparable to this study, the opinions of students, teachers and administrators could be catalogued in order to assess the suitability of the semester

system for the Junior High School.

4. Students and teachers were involved in this study, while school principals, coordinators, supervisors, and guidance personnel were not surveyed. Studies by persons interested in administration or guidance could be conducted to gather the opinions of these groups concerning the semester system.

5. From the results of this study it appears that another interesting study could involve an attempt to discover to what extent the cited advantages were due to the semester organization, and to what extent to the longer period used. Such a study might be difficult to set up and control since it would have to involve ten-month classes using short and long periods, and semestered classes using short and long periods.

6. In areas such as Ontario where the semester system has not been used, any number of studies could be conducted involving the suitability of the semester system for that area. Opinion surveys, achievement measures, and measures concerning attendance, drop-out rates, etc., would be appropriate. Hopefully the localities that have not tried the semester system will profit from the research conducted in Alberta.

7. When this study was conducted, one school had used the semester system for three years, two were in their second year of use, and two were in their first year. A follow-up study, designed similar to this study could now survey the teachers and students to assess if the opinion trends had changed.

8. The semester system has so far been well accepted in

Alberta. More experimentation with the trimester system and some initial trials involving the quarter system perhaps would uncover a more suitable and preferred method of school-year organization.

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APPENDICES

APPENDIX A

TEACHER OPINIONNAIRE RE SEMESTERING

EDMONTON COMPOSITE HIGH SCHOOLS (SEMESTERED)

This opinionnaire about the Semester System, has been prepared in two sections, Part A entitled The Semester System and Part B entitled The Eighty-Minute Period. It was felt that these are two separate concepts and that one need not necessarily have a bearing on the other. Your honest opinion will prove invaluable in the preparation of this report and your responses will be treated anonymously.

PLEASE COMPLETE THE ANSWER SHEET USING AN H.B. PENCIL ONLY.

Part I Teacher Information

(a) Name of School (Insert school no. in first 4 columns of the student number box.)

(b) In which department do you do the majority of your teaching?

(Upper right hand portion of answer sheet instead of your name.)

	S.Sem.	Vic	J.P.	Q.E.	McN.	Mean
				(%)		
1. Years of training beyond high school (as per salary schedule).						
(a) 2 years or less	0	1	11	0	3	5
(b) 3 years	0	7	7	4	2	5
(c) 4 years	28	31	41	48	33	39
(d) 5 years	50	33	22	28	33	29
(e) 6 years	21	29	19	14	29	22
2. How many years of teaching experience did you have at the beginning of this school year?						
(a) 0 - 3 years	50	23	39	35	48	38
(b) 4 - 7 years	7	25	24	31	16	23
(c) 8 - 11 years	14	13	9	13	8	11
(d) 12 - 15 years	0	8	12	6	5	8
(e) over 15 years	29	26	15	11	24	18
3. How many years of teaching experience at the secondary level on a full year system did you have?						
(a) 0 - 3 years	50	36	52	39	51	46
(b) 4 - 7 years	21	26	22	28	21	24
(c) 8 - 11 years	0	12	11	10	6	10

(d) 12 - 15 years	0	5	5	9	3	14
(e) over 15 years	29	21	9	10	19	14

4. How many years of teaching have you had on the semester system?

(a) ½ year	50	23	26	79	89	48
(b) 1 - 2 years	43	71	70	6	11	45
(c) 3 - 5 years	7	3	2	0	0	2
(d) over 5 years	0	1	1	0	0	1

Part 2 Semestering

5. The amount of time required for your lesson preparation has been

(a) greater	50	42	31	37	51	39
(b) less	0	8	9	3	0	6
(c) no different	43	42	42	31	29	37
(d) no opinion	7	8	17	20	14	14

6. Your marking load has been

(a) greater	14	31	24	34	30	29
(b) less	29	18	7	1	16	10
(c) no different	50	42	53	30	33	42
(d) no opinion	7	9	14	25	16	14

7. The students have put forth

(a) more effort in class	36	29	37	24	41	33
(b) less effort in class	21	7	6	9	5	7
(c) no change	36	56	35	31	21	36
(d) no opinion	7	9	20	28	27	19

8. The students have put forth

(a) more effort in their homework	0	13	15	7	32	15
(b) less effort in their homework	29	21	16	18	8	17
(c) no change	57	49	45	31	22	39
(d) no opinion	14	14	21	38	30	24

9. In regard to individual attention to students you have been able to give them

(a) more	57	46	49	45	51	49
(b) less	0	18	7	3	10	9
(c) no different	29	30	30	24	21	27
(d) no opinion	14	7	11	23	16	13

10. In facilitating the understanding of subject-matter concepts (basic principles, generalizations, relationships, etc.) semestering has been

(a) an aid	29	42	54	31	52	46
(b) a hindrance	21	8	5	13	5	8
(c) no different	29	44	26	25	18	29
(d) no opinion	21	7	14	24	19	15

11. As far as mastering factual material semestering has been

(a) an aid	43	39	44	20	49	38
(b) a hindrance	14	13	7	13	5	10
(c) no different	21	40	33	38	25	34
(d) no opinion	21	8	14	25	22	16

12. In facilitating creativity semestering has been

(a) an aid	0	34	42	30	29	33
(b) a hindrance	36	8	5	13	11	9
(c) no different	29	39	29	27	22	29
(d) no opinion	29	20	23	25	33	25

13. Because semestering may permit a student to complete his High School education in 2½ years possibly limiting his overall educational growth, this is

(a) of major concern	29	27	26	17	24	24
(b) of minor concern	29	46	40	37	25	37
(c) of no concern	14	21	22	27	30	25
(d) no opinion	29	5	9	14	14	11

14. Do you consider teaching the same subjects in the second semester as in the first semester

(a) desirable	79	56	63	45	67	59
(b) undesirable	7	8	2	10	3	5
(c) makes no difference	14	34	27	25	25	27
(d) no opinion	0	3	6	17	3	7

15. Do you find it a personal advantage to meet a new group of students in the second semester

(a) yes	57	56	66	42	62	57

(b) no	7	14	7	27	8	12
(c) makes no difference	29	23	20	13	18	20
(d) no opinion	7	5	7	16	10	9

16. You were able to get to know your students

(a) better	29	29	43	30	49	38
(b) not as well	29	25	11	25	13	17
(c) no differently	36	39	33	25	21	31
(d) no opinion	7	8	11	18	14	12

17. If you are teaching a skill subject, do you find semestering

(a) superior	21	29	38	16	37	31
(b) inferior	7	20	9	14	8	12
(c) no different	14	8	14	6	6	9
(d) no opinion	14	10	9	11	13	11
(e) not applicable	43	33	28	51	33	35

18. Does semestering give you the opportunity to enrich a course

(a) yes	21	36	52	35	48	43
(b) no	43	23	11	21	11	18
(c) no difference	7	29	27	20	27	25
(d) no opinion	14	8	8	20	13	11

19. Have you had sufficient time to complete the curriculum requirements in your subject area?

(a) yes	71	66	69	51	78	67
(b) no	14	25	17	27	13	19
(c) not applicable	14	8	11	18	8	12

20. Do you feel that more audio-visual equipment is needed because of semestering

(a) yes	21	58	65	66	60	61
(b) no	50	30	22	10	18	23
(c) not applicable	14	12	11	23	18	13

21. Semestering has affected the attendance of pupils

(a) positively	7	20	24	18	41	25
(b) negatively	21	30	12	17	6	16
(c) no change	50	35	37	37	27	35
(d) no opinion	21	13	24	27	21	22

22. Because of semestering student achievement appears

(a) greater	36	25	43	16	37	32
(b) less	0	14	5	11	2	8
(c) no different	36	51	31	44	30	39
(d) no opinion	21	10	20	28	25	20

23. Because of semestering your instruction is

(a) more intensive	64	56	56	37	59	52
(b) less intensive	0	5	4	6	6	5
(c) about the same	14	33	24	30	18	26
(d) no opinion	21	7	14	25	14	15

24. Since goals for students are more immediate because of semestering, their study habits have been

(a) better	43	30	32	14	35	29
(b) worse	0	10	4	1	5	5
(c) no different	43	43	38	49	29	41
(d) no opinion	14	14	22	30	25	22

25. Teaching is most demanding on a teacher's nervous energy. Semestering has resulted in

(a) more of a strain	36	40	37	49	33	40
(b) less of a strain	0	23	20	9	25	18
(c) no difference	57	29	25	19	25	26
(d) no opinion	7	7	18	21	14	15

26. Do you expect that the change from the first semester to the second will probably affect the club or event you sponsor

(a) advantageously	7	4	6	4	8	5
(b) adversely	0	10	14	14	5	11
(c) no differently	0	29	29	37	48	33
(d) no opinion	0	16	20	10	6	14
(e) not applicable	86	42	30	34	30	35

27. Do you feel that one mid-semester report is sufficient?

(a) yes	79	82	74	61	76	74
(b) no	15	17	23	24	18	20
(c) no opinion	7	1	3	14	3	6

28. When a students misses several days, he may want to drop the course because he is so far behind the class. Do you feel that the accelerated program of this system accentuates this problem?

(a) yes	57	79	68	62	56	66
(b) no	29	20	22	17	27	22
(c) no opinion	7	1	10	20	16	10

29. Do you favor semestering

(a) yes	71	75	68	49	91	77
(b) no	7	13	10	18	6	12
(c) no opinion	21	10	4	27	3	10

Eighty-Minute Period (or longer)

Semestering has resulted in eighty-minute class periods. The change from the conventional 40 or 52 minute periods has resulted in an adjustment in teaching methods etc. You are asked to compare the longer period with the shorter periods of the past.

30. For you, the teacher, the eighty-minute periods are

(a) of satisfactory length	71	73	78	45	71	69
(b) too long	29	20	13	23	14	17
(c) too short	0	0	0	3	0	1
(d) no opinion	0	4	2	11	5	5
(e) not applicable	0	3	4	16	8	6

31. For the above-average student, the eighty-minute periods are

(a) of satisfactory length	71	83	76	58	73	73
(b) too long	23	13	5	10	8	9
(c) too short	0	3	6	4	2	4
(d) no opinion	7	1	10	23	14	11

32. For the average student the eighty-minute periods are

(a) of satisfactory length	79	66	72	45	65	65
(b) too long	14	33	14	25	16	21
(c) too short	0	0	1	1	0	1
(d) no opinion	7	1	11	24	14	12

33. For the below-average student, the eighty-minute periods are

(a) of satisfactory length	21	21	21	9	32	21
(b) too long	50	70	63	63	54	63
(c) too short	21	7	2	7	2	5
(d) no opinion	7	3	10	14	10	8
34. The amount of your lesson preparation has been						
(a) greater	57	44	43	51	62	48
(b) less	0	8	4	7	0	5
(c) no different	36	42	31	20	24	31
(d) no opinion	7	7	19	18	11	14
35. Your marking load has been						
(a) greater	14	31	24	44	33	31
(b) less	14	20	11	6	18	13
(c) no different	64	42	46	25	29	39
(d) no opinion	7	8	15	21	18	14
36. The students have put forth						
(a) more effort in class	43	27	32	25	41	31
(b) less effort in class	14	12	5	11	6	8
(c) no change	29	53	37	37	25	39
(d) no opinion	14	8	24	23	22	19
37. The students have put forth						
(a) more effort in doing homework	14	12	11	10	25	14
(b) less effort in doing homework	29	21	12	17	11	16
(c) no change in doing homework	43	55	47	41	27	43
(d) no opinion	14	13	27	27	30	23
38. In maintaining discipline in class, the eighty-minute period has been						
(a) advantageous	14	10	11	9	22	13
(b) detrimental	7	14	5	20	13	12
(c) not significantly different	64	73	65	51	46	60
(d) no opinion	14	3	16	17	18	13
39. In regard to individual attention to students you have been able to give them						
(a) more	57	53	55	47	54	52
(b) less	0	8	3	7	3	5
(c) no difference	29	33	28	23	21	26
(d) no opinion	14	5	14	18	21	14

40. You have used audio-visual equipment

(a) more	36	36	51	37	41	43
(b) less	7	4	1	1	3	3
(c) the same	43	49	29	32	33	35
(d) no opinion	14	10	16	28	21	18

41. You have used the library facilities

(a) more	14	18	24	23	19	22
(b) less	21	9	3	4	2	5
(c) the same	43	57	50	38	52	49
(d) no opinion	21	16	20	32	24	

42. You have been able to make use of outside resources (field trips, speakers, etc.)

(a) more	7	21	42	30	21	29
(b) less	21	4	7	4	3	6
(c) the same	36	48	33	24	35	35
(d) no opinion	29	27	15	34	38	26

43. In class presentation you are

(a) more flexible	36	62	63	51	52	59
(b) less flexible	7	5	2	9	2	4
(c) no different	50	25	15	16	22	20
(d) no opinion	7	8	12	21	22	14

44. You were able to get to know your students

(a) better	21	33	50	31	48	41
(b) not as well	14	20	5	14	11	11
(c) no differently	50	43	29	31	18	31
(d) no opinion	14	5	14	18	21	14

45. If you are teaching a skill subject, the eighty-minute period is

(a) superior	28	40	50	10	40	37
(b) inferior	7	9	7	11	6	8
(c) no different	14	7	5	13	6	8
(d) no opinion	7	8	6	13	13	9
(e) not applicable	43	34	30	51	32	36

46. Does teaching in the eighty-minute period require more A.V. equipment?

(a) yes	36	56	65	59	54	59
(a) no	50	30	15	9	18	19
(c) no opinion	14	13	16	27	24	19

47. Does an eighty-minute period encourage the use of student discussion groups, committee work, research projects, etc.

(a) yes	57	75	80	58	75	72
(b) no	0	4	3	4	5	4
(c) no opinion	43	8	6	14	8	10
(d) not applicable	0	12	9	20	8	12

48. The eighty-minute period tends to help pupils achieve

(a) better grades	36	31	41	13	27	29
(b) lower grades	0	5	0	6	0	2
(c) no different grades	29	49	33	48	37	41
(d) no opinion	29	14	23	28	30	24

49. In the eighty-minute period, instruction is

(a) more intensive	43	39	52	32	44	44
(b) less intensive	7	12	9	9	3	8
(c) about the same	29	46	24	31	30	32
(d) no opinion	21	4	12	25	19	14

50. Teaching is most demanding on a teacher's nervous energy. The eighty-minute period is

(a) more of a strain	36	44	39	49	35	42
(b) less of a strain	7	25	10	7	18	14
(c) do different	50	27	37	18	25	29
(d) no opinion	7	4	13	21	19	13

51. The eighty-minute period has affected the attendance of pupils

(a) positively	14	22	19	14	41	23
(b) negatively	21	29	12	16	6	16
(c) no change	43	39	42	39	24	38
(d) no opinion	21	9	24	29	24	21

52. Do you feel that inappropriate behavior, (such as truancy, skipping classes, extreme "doodling" on desks, wandering in the hallways, dropping out of school) is caused by the eighty-minute period?

(a) yes	7	22	11	27	13	16
(b) no	71	61	66	37	54	57
(c) no opinion	21	16	19	30	25	22

53. When a student misses several days, he may want to drop the course because he is so far behind the class. Do you feel that the eighty-minute period accentuates this problem?

(a) yes	64	62	56	56	41	55
(b) no	29	26	26	21	33	26
(c) no opinion	7	10	15	18	19	16

STUDENT OPINIONNAIRE RE SEMESTERING

EDMONTON COMPOSITE HIGH SCHOOLS (SEMESTERED).

This opinionnaire about the Semester System has been prepared in two sections. Part A entitled The Semester System and Part B entitled The Eighty-Minute Period. It was felt these two separate concepts do not necessarily have a bearing on one another. Your honest opinion will prove invaluable in the preparation of this report and your responses will be treated anonymously.

PLEASE COMPLETE THE ANSWER SHEET USING AN H.B. PENCIL ONLY.

Name of School (Insert school number in first 4 columns of the student number box on answer sheet.

Part I Student Information

	S.Sem.	Vic	J.P.	Q.E. (%)	McN	MEAN
1. How long have you been in high school?						
(a) 0 - 1 year	10	31	39	37	36	34
(b) 1 - 2 years	2	31	30	26	32	29
(c) 2 - 3 years	11	26	24	28	22	25
(d) 3 or more years	76	11	6	5	8	11
2. Your program is mainly						
(a) Academic	90	52	59	62	72	62
(b) Technical vocational	5	21	14	1	1	10
(c) Business	0.4	10	15	16	20	14
(d) Fine Arts	0.4	2	1	1	1	1
(e) General	3	14	10	15	4	11
3. What was your Grade 9 average?						
(a) below 50	3	14	10	10	5	10
(b) 50 - 60	33	43	34	35	31	36
(c) 60 - 75	53	31	36	36	43	36
(d) 75 or over	8	0.4	17	14	19	14
4. Do you belong to any extra-curricular clubs?						
(a) none	80	68	62	55	48	60
(b) one	10	18	21	23	27	21

(c) two	6	8	8	12	13	10
(d) more than two	4	5	7	6	10	7

5. Do you participate in House League activity?

(a) not at all	78	72	60	70	52	65
(b) one or two activities	5	6	11	6	13	8
(c) occasionally	11	15	21	16	25	18
(d) almost always	4	5	8	4	9	6

6. Have you participated in any co-curricular activities - e.g. enrichment courses?

(a) yes	38	22	28	26	25	26
(b) no	61	77	70	70	72	71

7. Have you ever belonged to a committee of the Students' union?

(a) yes	31	19	12	19	20	18
(b) no	59	69	66	61	61	64
(c) been given no opportunity	9	11	21	15	17	16

8. Do you have a job?

(a) part-time	52	42	36	34	33	38
(b) full-time	13	4	3	3	2	3
(c) none	34	53	59	59	62	57

9. Do you own a car?

(a) yes	40	16	11	8	10	13
(b) no	49	65	70	69	67	67
(c) I plan to buy one	11	18	18	19	21	19

10. Do you drive a car to school?

(a) yes	46	11	8	6	10	11
(b) no	42	72	72	79	65	71
(c) as a passenger	12	16	18	11	22	16

11. Have you ever been in a semester school?

(a) less than one-half year	76	33	27	68	71	48
(b) one-half year	13	15	19	24	23	19
(c) 1 - 2 years	8	50	53	3	2	29
(d) 3 - 5 years	1	1	1	0	1	1

12. Do you take any Trade and Services courses? (Jasper Place only).

(a) yes	1	3	17	1	2	6
(b) no	77	64	81	67	72	71

13. Do you find that the time required for exam preparation in the semester system, is --

(a) greater	27	16	20	19	19	19
(b) less	16	23	27	21	26	24
(c) no difference	43	43	38	37	37	39
(d) no opinion	14	17	14	19	16	16

14. Is your work load --

(a) greater	44	20	13	27	35	25
(b) less	13	30	39	25	27	30
(c) no different	35	41	33	34	28	35
(d) no opinion	8	8	8	10	6	8

15. Do you feel that you can put forth --

(a) more effort in class	66	58	62	46	40	55
(b) less effort in class	4	6	5	10	10	7
(c) no change	22	25	24	30	32	27
(d) no opinion	7	10	8	11	9	9

16. Do you feel that you can put forth --

(a) more effort in homework	63	42	48	37	48	44
(b) less effort in homework	4	11	13	12	15	12
(c) no change	25	37	29	35	29	33
(d) no opinion	9	9	9	12	8	9

17. Is the amount of homework in academic subjects --

(a) greater	52	31	33	33	45	35
(b) less	4	16	18	13	15	15
(c) the same	33	36	35	31	27	33
(d) no opinion	10	16	16	17	11	15

18. Is the amount of homework in technical subjects --

(a) greater	5	8	5	6	7	6
(b) less	4	13	14	11	12	13
(c) the same	4	24	14	18	18	18
(d) no opinion	83	53	64	58	56	59

19. In regards to individual attention in academic subjects, do you feel teachers give --

(a) more	44	27	26	24	23	26
(b) less	17	18	21	15	21	19
(c) the same	30	37	32	38	42	38
(d) no opinion	8	16	14	18	12	15

20. In regards to individual attention in technical subjects, do you feel teachers give --

(a) more	6	24	22	14	15	19
(b) less	1	6	4	6	7	6
(c) the same	6	21	14	21	21	18
(d) no opinion	82	46	58	54	42	54

21. Do you find concept comprehension of courses --

(a) easier	43	30	36	22	28	30
(b) harder	18	19	19	19	25	20
(c) no difference	25	32	29	32	29	30
(d) no opinion	13	18	15	21	15	17

22. Do you find learning factual material --

(a) easier	40	34	37	25	30	32
(b) harder	21	18	18	26	23	21
(c) no difference	33	38	36	36	35	36
(d) no opinion	6	9	7	10	9	9

23. Because you may finish your schooling in 2½ years, do you feel that this limits your overall educational growth --

(a) yes	7	9	10	9	12	10
(b) no	48	62	63	54	54	58
(c) furthers it	19	15	13	12	13	14
(d) no opinion	25	12	12	21	17	16

24. Do you find it an advantage to meet a new group of students in the second semester?

(a) yes	34	79	74	58	64	68
(b) no	10	5	7	10	8	8
(c) no difference	21	9	12	18	12	13
(d) no opinion	35	55	6	9	14	9

25. Do you find it an advantage to meet new teachers in the second semester?

(a) yes	36	71	70	55	59	63
(b) no	12	10	10	15	13	12

(c) no difference	19	9	11	17	13	13
(d) no opinion	32	8	6	9	13	10

26. Were you able to get to know the teachers --

(a) better	27	29	38	26	27	30
(b) not as well	23	17	15	14	19	16
(c) no difference	41	45	38	45	43	42
(d) no opinion	10	8	7	10	9	9

27. Were you able to get to know fellow students --

(a) better	15	35	40	32	32	34
(b) not as well	39	17	17	13	18	17
(c) no difference	39	40	37	44	43	41
(d) no opinion	7	6	4	7	5	6

28. In a skill subject (e.g. Typing) do you find the learning situation to be --

(a) superior	4	22	28	14	17	20
(b) inferior	3	6	7	7	9	7
(c) no difference	3	16	15	16	15	15
(d) not applicable	28	15	12	18	18	16
(e) no opinion	60	39	37	39	40	39

29. In an academic subject, do you find the learning situation to be --

(a) superior	60	38	42	27	39	37
(b) inferior	6	8	9	12	13	10
(c) no different	25	33	29	33	29	31
(d) not applicable	2	4	4	6	3	4
(e) no opinion	8	16	15	18	14	15

30. Do you find courses more enriched and fuller in semesters?

(a) yes	42	52	58	36	38	47
(b) no	27	18	14	27	28	21
(c) no difference	24	21	20	21	22	21
(d) no opinion	7	8	6	11	9	8

31. Do you feel that there is sufficient time in semestering to complete curricular requirements?

(a) yes	79	71	74	55	60	66
(b) no	13	14	13	23	25	18
(c) not applicable	3	4	4	4	4	4
(d) no opinion	4	10	8	14	9	10

32. Do you feel that Audio-Visual aids were necessary when there were no semesterings?

(a) yes	30	37	47	36	40	40
(b) no	16	15	15	15	18	16
(c) no opinion	52	45	32	41	36	40

33. Do you feel that Audio-Visual aids were necessary because of semestering?

(a) yes	27	32	34	33	31	32
(b) no	21	17	22	16	23	19
(c) no difference	14	20	23	21	24	21
(d) no opinion	36	30	19	26	20	25

34. Do you feel that attendance in semestering is --

(a) more necessary	84	60	66	68	63	65
(b) less necessary	2	12	11	7	11	10
(c) no difference	13	21	17	15	20	18
(d) no opinion	2	6	4	5	4	5

35. Because of semestering, do you find instruction --

(a) more intensive	70	51	57	44	57	53
(b) less intensive	5	7	8	9	8	8
(c) about the same	20	33	28	34	26	30
(d) no opinion	5	7	6	8	6	7

36. Do you think that your study habits in semestering are --

(a) better	47	34	34	22	32	31
(b) worse	12	13	18	23	22	18
(c) no difference	36	44	42	43	38	42
(d) no opinion	4	7	5	8	5	6

37. Do you feel that strain on teachers because of semestering is --

(a) greater	59	36	38	42	42	40
(b) less	4	16	17	11	15	14
(c) no different	21	30	37	26	26	27
(d) no opinion	16	17	16	16	14	16

38. Do you feel that strain on pupils because of semestering is --

(a) greater	57	32	30	45	50	39

(b) less	12	24	30	15	20	22
(c) no different	27	33	31	28	23	29
(d) no opinion	4	7	7	8	5	7

39. Do you feel that changes from one semester to another will affect clubs --

(a) advantageously	6	9	8	6	8	8
(b) adversely	15	8	11	9	12	10
(c) no difference	13	44	47	42	42	42
(d) not applicable	25	13	12	13	12	18
(e) no opinion	41	24	21	26	25	25

40. Do you feel that one mid-semester progress report is sufficient?

(a) yes	71	67	71	58	64	66
(b) no	24	22	22	24	26	23
(c) no opinion	4	8	5	12	6	8

41. Do you feel that mid-semester progress report is necessary?

(a) yes	83	74	75	65	71	72
(b) no	16	14	17	18	20	17
(c) no opinion	4	9	5	10	5	7

42. When you have missed several successive days, you may want to drop the subject because of missed material. Does semestering accent this problem?

(a) yes	57	48	49	57	54	52
(b) no	23	28	28	16	23	24
(c) no opinion	8	15	15	13	12	14
(d) not applicable	11	8	7	9	9	8

43. Do you favor the two semester per year program?

(a) yes	91	88	90	71	81	83
(b) no	4	5	4	13	10	8
(c) no opinion	4	5	3	11	6	6

Part II Eighty-Minute Period (or longer).

Semestering has resulted in eighty-minute class periods. The change from the conventional 40 or 52 minute periods has resulted in an adjustment in teaching methods, etc. You are asked to compare the longer period with the shorter periods of the past.

44. For the above average student, do you feel class periods are --

(a) too long	19	24	18	26	32	24
(b) too short	1	5	5	5	5	5
(c) satisfactory	65	57	65	49	50	56
(d) no opinion	13	12	11	12	10	11

45. For the average student, do you feel class periods are --

(a) too long	18	25	21	33	35	27
(b) too short	2	3	3	3	4	3
(c) satisfactory	76	61	68	50	52	59
(d) no opinion	4	8	7	8	6	7

46. For the below average student, do you feel periods are --

(a) too long	40	40	43	44	49	43
(b) too short	10	10	9	10	10	10
(c) satisfactory	32	27	26	19	21	34
(d) no opinion	16	18	19	18	15	18

47. Do you feel that the longer period provides more opportunity for students to work at their own speed?

(a) yes	49	62	65	50	52	58
(b) no	35	22	21	31	31	25
(c) not applicable	8	5	5	5	6	6
(d) no opinion	8	9	6	8	8	8

48. Do you feel that the amount of work is --

(a) greater	68	43	45	45	56	48
(b) less	3	11	14	10	11	11
(c) no difference	25	38	34	30	26	33
(d) no opinion	4	6	5	8	4	6

49. Do you feel that your attention in the eighty-minute class is --

(a) greater	35	19	20	16	15	18
(b) less	22	33	32	42	48	37
(c) the same	40	38	40	29	30	35
(d) no opinion	4	6	5	7	4	36

50. For unassigned periods, do you find the eighty-minute period --

(a) better	24	43	51	26	50	41
(b) worse	22	15	15	20	18	17
(c) no different	18	18	15	17	11	16
(d) no opinion	35	21	18	30	18	23

51. Do you find that in the eighty-minute period, behavior is --

(a) better	38	18	21	14	17	19
(b) worse	7	22	20	31	32	25
(c) no different	45	48	50	40	42	45
(d) no opinion	8	10	6	9	7	8

52. Do you find the homework load in the eighty-minute period --

(a) greater	42	28	26	32	39	31
(b) less	8	25	31	25	22	25
(c) no different	37	38	36	29	31	34
(d) no opinion	8	6	5	8	6	6

53. The longer period allows library facilities to be used --

(a) more	18	60	63	39	49	52
(b) less	12	8	9	11	11	10
(c) no different	18	18	17	26	26	21
(d) no opinion	51	11	9	17	13	14

54. With a longer period, do you feel that outside resources such as Field Trips, speakers, etc. could be used --

(a) more	48	78	83	71	81	77
(b) less	5	4	3	4	4	4
(c) the same	14	8	7	8	7	8
(d) no opinion	31	8	5	9	6	8

55. Do you feel that the longer period encourages the use of student discussion groups, committee work, research projects, independent study, and so on?

(a) yes	63	73	74	62	67	69
(b) no	13	9	9	13	16	11
(c) no opinion	13	11	11	12	11	11
(d) not applicable	10	4	3	4	3	4

56. Do you feel that the longer period tends to allow you to achieve --

(a) better grades	45	39	45	28	30	37
(b) lower grades	4	7	7	14	15	10
(c) no different grades	40	40	38	38	42	39
(d) no opinion	10	9	6	9	8	8

57. Do you feel that the longer period generally affected your attendance?

(a) positively	34	32	33	30	36	33
(b) negatively	16	14	17	13	18	15
(c) no change	41	39	38	37	35	38
(d) no opinion	7	10	9	10	7	9

58. Do you feel that the longer period has resulted in inappropriate behaviour such as absenteeism, inattention and vandalism?

(a) yes	17	24	26	26	28	25
(b) no	46	35	35	28	34	33
(c) of no consequence	20	18	19	20	19	19
(d) no opinion	13	19	17	17	14	17

APPENDIX B

TEACHERS' AND STUDENTS' RESPONSES

TO ITEMS OF SIMILAR INTENT

ITEM NO. (TCHR.-ST.)		SCHOOLS (% TCHRS/% STUDENTS)					
		S.Sem.	Vic	J.P.	Q.E.	McN	Mean
7-15	The students have put forth						
	(a) more effort in class	36/66	29/58	37/62	24/46	41/40	33/55
	(b) less effort in class	21/4	7/6	6/5	9/10	5/10	7/7
	(c) no change	36/22	56/25	35/24	31/30	21/32	36/27
	(d) no opinion	7/7	9/10	20/8	28/11	27/9	19/9
8-16	The students have put forth						
	(a) more effort in their homework	0/63	13/42	15/48	7/37	32/48	15/44
	(b) less effort in their homework	29/4	21/11	16/13	18/12	8/15	17/12
	(c) no change	57/25	49/37	45/29	31/35	22/29	39/33
	(d) no opinion	14/9	14/9	21/9	38/12	30/8	24/9
9-19	In regard to individual attention to students you have been able to give them						
	(a) more	57/44	46/27	49/26	45/24	51/23	49/26
	(b) less	0/17	18/18	7/21	3/15	10/21	9/19
	(c) no different	29/30	30/37	30/32	24/38	21/42	27/38
	(d) no opinion	14/8	7/16	11/14	23/18	16/12	13/15
10-21	In facilitating the understanding of subject matter concepts semestering has been						
	(a) an aid	29/43	42/30	54/36	31/22	52/28	46/30
	(b) a hindrance	21/18	8/19	5/19	13/19	5/25	8/20
	(c) no different	29/25	44/32	26.29	25/32	18/29	29/30
	(d) no opinion	21/13	7/18	14/15	24/21	19/15	15/17
11-22	As far as mastering factual material						

	semestering has been						
	(a) an aid	43/40	39/34	44/37	20/25	47/30	38/32
	(b) a hindrance	14/21	13/18	7/18	13/26	5/23	10/21
	(c) no different	21/33	40/38	33/36	38/36	25/35	34/36
	(d) no opinion	21/6	8/9	14/7	25/10	22/9	16/9
13-23	Because semestering may permit a student to complete his High School education in 2½ years possibly limiting his overall educational growth, this is						
	(a) of major concern	29/7	27/9	26/10	17/9	24/12	24/10
	(b) of minor concern	29/48	46/62	40/63	37/54	25/54	37/58
	(c) of no concern	14/19	21/15	22/13	27/12	30/13	25/14
	(d) no opinion	29/25	5/12	9/12	14/21	14/17	11/16
15-25	Do you find it a personal advantage to meet a new group of students/teachers in the second semester						
	(a) yes	57/36	56/71	66/70	42/55	62/59	57/63
	(b) no	7/12	14/10	7/10	27/15	8/13	12/12
	(c) makes no difference	29/19	23/9	20/11	13/17	18/13	20/13
	(d) no opinion	7/32	5/8	7/6	16/9	10/13	9/10
16-26	You were able to get to know your students-teachers						
	(a) better	29/27	29/29	43/38	30/26	49/27	38/30
	(b) not as well	29/23	25/17	11/15	25/14	13/19	17/16
	(c) no differently	36/41	39/45	33/38	25/45	21/43	31/42
	(d) no opinion	7/10	8/8	11/7	18/10	14/9	12/9
17-28	If you are involved in a skill subject, do you find semestering						
	(a) superior	21/4	29/22	38/28	16/14	37/17	3/20
	(b) inferior	7/3	20/6	9/7	14/7	8/9	12/7
	(c) no different	14/3	8/16	14/15	6/16	6/15	9/15
	(d) no opinion	14/28	10/15	9/12	11/18	13/18	11/16
	(e) not applicable	43/60	33/39	28/37	51/39	33/40	35/39
18-30	Does semestering give						

	you the opportunity to enrich a course						
	(a) yes	21/42	36/52	52/58	35/36	48/38	43/47
	(b) no	43/27	23/18	11/14	21/27	11/28	18/21
	(c) no difference	7/24	29/21	27/20	20/21	27/22	25/21
	(d) no opinion	14/7	8/8	8/6	20/11	13/9	11/8
19-31	Have you had sufficient time to complete the curriculum requirements in your subject area?						
	(a) yes	71/79	66/71	69/74	51/55	78/60	67/66
	(b) no	14/13	25/14	17/13	27/23	13/25	19/18
	(c) not applicable	14/3	8/4	11/4	18/4	8/4	12/4
21-34	Semestering has affected the attendance of pupils						
	(a) positively	7/84	20/60	24/66	18/68	41/63	25/65
	(b) negatively	21/2	30/12	12/11	17/7	6/11	16/10
	(c) no change	50/13	35/21	37/17	37/15	27/20	35/18
	(d) no opinion	21/2	13/6	24/4	27/5	21/4	22/5
22-56	Because of semestering student achievement appears						
	(a) greater	36/45	25/39	43/45	16/28	37/30	32/37
	(b) less	0/4	14/7	5/7	11/14	2/15	8/10
	(c) no different	36/40	51/40	31/38	44/38	30/42	39/39
	(d) no opinion	21/10	10/9	20/6	28/9	25/8	20/8
23-35	Because of semestering instruction is						
	(a) more intensive	64/70	56/51	56/57	37/44	59/57	52/53
	(b) less intensive	0/5	5/7	4/8	6/9	6/8	5/8
	(c) about the same	14/20	33/33	24/28	30/34	18/26	26/30
	(d) no opinion	21/5	7/7	14/6	25/8	14/6	15/7
24-36	Since goals for students are more immediate because of semestering, their study habits have been						
	(a) better	43/47	30/34	32/34	14/22	35/32	29/31
	(b) worse	0/12	10/13	4/18	1/23	5/22	5/18
	(c) no different	43/36	43/44	38/42	49/43	29/38	41/42
	(d) no opinion	14/4	14/7	22/5	30/8	25/5	22/6

25-37 Teaching is most demanding on a teacher's nervous energy. Semestering has resulted in

(a)	more of a strain	36/59	40/36	37/38	49/42	33/42	40/40
(b)	less of a strain	0/4	23/16	20/17	9/11	25/15	18/14
(c)	no difference	57/21	29/30	25/37	19/26	25/26	26/27
(d)	no opinion	7/16	7/17	18/16	21/16	14/14	15/16

26-39 Do you expect that the change from the first semester to the second semester will probably affect clubs

(a)	advantageously	7/6	4/9	6/8	4/6	8/8	5/8
(b)	adversely	0/15	10/8	14/11	14/9	5/12	11/10
(c)	no differently	0/13	29/44	29/47	37/42	48/42	33/42
(d)	no opinion	0/41	16/24	20/21	10/26	6/25	14/25
(e)	not applicable	86/25	42/13	30/12	34/13	30.12	35/18

27-40 Do you feel that one mid-semester report is sufficient?

(a)	yes	79/71	82/67	74/71	61/58	76/64	74/66
(b)	no	15/24	17/22	23/22	24/24	18/26	20/23
(c)	no opinion	7/4	1/8	3/5	14/12	3/6	6/8

28-42 When a student misses several days, he may want to drop the course because he is so far behind the class. Do you feel that the accelerated program of this system accentuates this problem?

(a)	yes	57/57	79/48	68/49	62/57	56/54	66/52
(b)	no	29/23	20/28	22/28	17/16	27/23	22/24
(c)	no opinion	7/8	1/15	10/15	20/13	16/12	10/14

29-43 Do you favor semestering

(a)	yes	71/91	75/88	86/90	49/71	91/81	77/83
(b)	no	7/4	13/5	10/4	18/13	6/10	12/8
(c)	no opinion	21/4	10/5	4/3	27/11	3/6	10/6

Eighty-Minute Period (or longer)

Semestering has resulted in eighty-minute class periods. The change from the conventional 40 or 52 minute periods has resulted in an adjustment in teaching methods etc. You are asked to compare the longer period with the shorter periods of the past.

31-44 For the above-average student, the eighty-minute periods are

(a) of satisfactory length	71/65	83/57	76/65	58/49	73/50	73/56
(b) too long	23/19	13/24	5/18	10/26	8/32	9/24
(c) too short	0/1	3/5	6/5	4/5	2/5	4/5
(d) no opinion	7/13	1/12	10/11	23/12	14/10	11/11

32-45 For the average student the eighty-minute periods are

(a) of satisfactory length	79/76	66/61	72/68	45/50	65/52	65/59
(b) too long	14/18	33/25	14/21	25/33	16/35	2/27
(c) too short	0/2	0/3	1/3	1/3	0/4	1/3
(d) no opinion	7/4	1/8	11/7	24/8	14/6	12/7

33-46 For the below-average student, the eighty-minute periods are

(a) of satisfactory length	21/32	21/27	21/26	9/19	32/21	21/34
(b) too long	50/40	70/40	63/43	63/44	54/49	63/43
(c) too short	21/10	7/10	2/9	7/10	2/10	5/10
(d) no opinion	7/16	3/18	10/19	14/18	10/15	8/18

37-16 The students have put forth

(a) more effort in doing homework	14/63	12/42	11/48	10/37	25/48	14/44
(b) less effort in doing homework	29/4	21/11	12/13	17/12	11/15	16/12
(c) no change in doing homework	43/25	55/37	47/29	41/35	27/29	43/33
(d) no opinion	14/9	13/9	27/9	27/12	30.8	23/9

38-51 In maintaining discipline in class, the eighty-minute period has been

(a) advantageous	14/38	10/18	11/21	9/14	22/17	13/19

	(b) detrimental	7/7	14/22	5/20	20/31	13/32	12/25
	(c) not significantly different	64/45	73/48	65/50	51/40	46/42	60/45
	(d) no opinion	14/8	3/10	16/6	17/9	18/7	13/8
41-53	You have used the library facilities						
	(a) more	14/18	18/60	24/63	23/39	19/49	22/52
	(b) less	21/12	9/8	3/9	4/11	2/11	5/10
	(c) the same	43/18	57/18	50/17	38/26	52/26	49/21
	(d) no opinion	21/51	16/11	20/9	32/17	24/13	23/14
47-55	Does an eighty-minute period encourage the use of students discussion groups, committee work, research projects, etc.						
	(a) yes	57/63	75/73	80/74	58/63	75/67	72/69
	(b) no	0/13	4/9	3/9	4/13	5/16	4/11
	(c) no opinion	43/13	8/11	6/11	14/12	8/11	10/11
	(d) not applicable	0/10	12/4	9/3	20/4	8/3	12/4
48-56	The eighty-minute period tends to help pupils achieve						
	(a) better grades	36/45	31/39	41/45	13/28	27/30	29/37
	(b) lower grades	0/4	5/7	0/7	6/14	0/15	2/10
	(c) do different grades	29/40	49/40	33/38	48/38	37/42	41/39
	(d) no opinion	29/10	14/9	23/6	28/9	30/8	24/8
51-57	The eighty-minute period has affected the attendance of pupils						
	(a) positively	14/34	22/32	19/33	14/30	41/36	23/33
	(b) negatively	21/16	29/14	12/17	16/13	6/18	16/15
	(c) no change	43/41	39/39	42/38	39/37	24/35	38/38
	(d) no opinion	21/7	9/10	24/9	29/10	24/7	21/9
52-58	Do you feel that inappropriate behavior, (such as truancy, skipping classes, extreme "doodling" on desks, wandering in the hallways, dropping out of school) is caused by the eighty-minute period?						

(a)	yes	7/17	22/24	11/26	27/26	13/28	16/25
(b)	no	71/46	61/35	66/35	37/28	54/34	57/33
(c)	no opinion	21/13	16/19	19/17	30/17	25/14	22/17

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